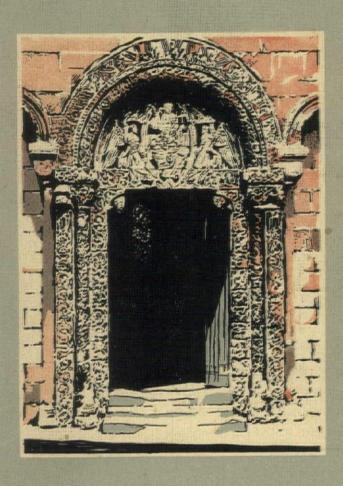
# ARCHITECTURAL FORUM



AUGUST 1926



A group of Kansas City buildings that are equipped with Ideal

### Standardize on Ideal for Elevator Door Efficiency

Perfect operation and control are guaranteed when *Ideal* Elevator Door Hardware is installed. For while hangers, closers, checking devices and safety interlocks are distinctly separate mechanisms, they all synchronize perfectly when installed together. *Complete Unit Control* under a single responsibility is assured. Door weight is evenly distributed; doors glide on steel ball bearings along heavy, dirt-proof track, smoothly and noiselessly. Speed and quiet are important *Ideal* features. Either mechanical or electric inter-locks can, like all other *Ideal* elevator door hardware, be added without changing present controller mechanism. If, in addition to speed and freedom from trouble, you want real elevator door safety, write us for complete information. Our engineers are at your service.

# Richards-Wilcox Mfg. Co.

AURORA, ILLINOIS, U.S.A.

New York Boston Philadelphia Cleveland Cincinnati Indianapolis St. Louis New Orleans Chicago Minnespolis Kansas City Los Angeles San Francisco Omaha Seattle: Detroit.

Montreal - RICHARDS-WILCOX CANADIAN CO., LTD., LONDON, ONT. - Winnipeg

(626)

Largest and most complete line of door hardware made

# True Economy in Home Building

In the first group of a series of model homes now being constructed throughout the country by the Home Owners' Service Institute, Natco Hollow Building Tile is being used for the walls of many of the homes. These homes, ideal in design, construction and equipment, will have Natco walls because Natco Hollow Building Tile best meets the need of the Institute for an economical wall material which will give permanent satisfaction.

#### WALLS OF VATCO TILE ARE DRY

The double shell construction eliminates through mortar joints. This, combined with the still air spaces in the tile walls, between the inner and outer shells, prevents heat, cold and moisture from penetrating. Stucco and plaster applied to firesafe Natco walls will not crack, scale, craze or come off. The large units, being light and easily handled, save in time, labor and mortar.

#### NATIONAL FIRE PROPFING COMPANY

General Offices:

609 Fulton Building,

Pittsburgh, Pa.

IN CANADA:

National Fire Proofing Company of Canada, Ltd. Dominion Bank Building, Toronto, Ont.



EVERYONE allied with the building industry should make it a point to secure a copy of the new Natco Tex-Tile book. It tells an authoritative story of true economy in home building. Write for it today.

Volume XLV

THE ARCHITECTURAL FORUM

Number 2

Published Monthly by Rogers and Manson Company, 383 Madison Avenue, New York, N. Y. Yearly Subscription: U. S. A., Insular Possessions and Cuba, \$6. Canada, \$6.75. Foreign Countries in the Postal Union, \$7.50. Single copies, 60 cents. Entered as second Class Matter at the Post Office, New York, N. Y., under the Act of March 3, 1879.

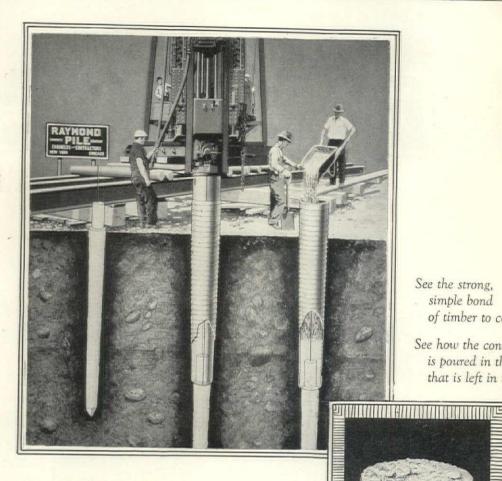


The Tower Building, Cleveland Union Terminals Company, Cleveland, Ohio Engineer, Mr. H. D. Jouett; Architects, Graham, Anderson, Probst & White of Chicago General Contractors, The John Gill & Sons, Cleveland, Ohio

# DOUBLE-HUNG WINDOWS

QUALITY WINDOWS FOR GOOD BUILDINGS

TRUSCON STEEL COMPANY, YOUNGSTOWN, OHIO Warehouses and Offices in All Principal Cities



See the strong, simple bond of timber to concrete

See how the concrete is poured in the shell that is left in the ground

When you specify Raymond Composite Piles,

you can be certain of absolute satisfaction-for the strength of the Joint and the accuracy of alignment are guaranteed by the Raymond reputation.

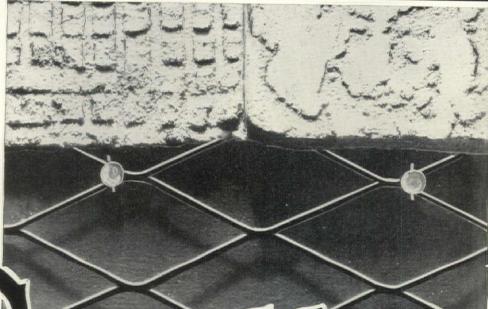
A Form for Every Pile-A Pile for Every Purpose

RAYMOND CONCRETE PILE CO. NEW YORK: 140 Cedar Street CHICAGO: 111 W. Monroe St. Raymond Concrete Pile Co., Ltd., Montreal, Canada Branches in all principal cities

RAYMOND



KEWANEE BOILER COMPANY — KEWANEE, ILLINOIS BRANCHES IN ALL PRINCIPAL CITIES STEEL HEATING BOILERS · RADIATORS · WATER HEATERS · TANKS AND WATER HEATING GARBAGE BURNERS



# Reellart

A New
And Better
Stucco Mesh

EARTILY endorsed by builders as a scientifically correct, practical and moderately priced stucco base and reinforcing.

Stucco Mesh STEELHART Expanded Metal Stucco Mesh provides a rigid, continuous

strengthening steel framework or "skeleton" for either hand applied or "gunited" stucco, checking cracking tendencies and giving permanence to the work.

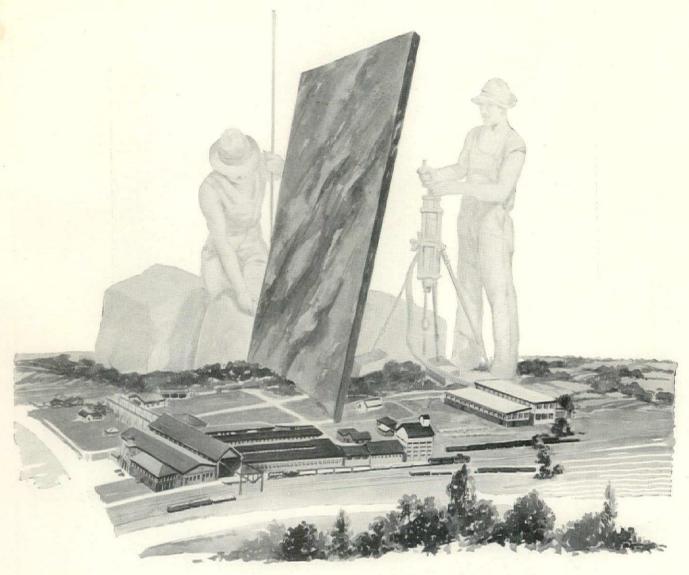
No stretching is needed. And with the use of the self-furring nails shown above, the need for separate furring is eliminated.

The "diamonds" are correctly shaped and sized to give free access to the mortar so that it completely fills the space back of the mesh, properly imbedding the steel, thus placing the reinforcement where it belongs—in the very heart of the cement slab.



Samples of STEELHART and descriptive circular gladly sent. We suggest a trial of this very satisfactory stucco base.

NORTH WESTERN EXPANDED METAL COMPANY
1234 Old Colony Bldg., CHICAGO



#### Best interior marbles are inexpensive

Interior marble, whether for ashlar work, floors or the complete interior of an especially large project is not only inexpensive in comparison to its great beauty but its maintenance cost, where our own Appalachian Tennessee Marble is used, is nil.

Our great quarrying and mill facilities, modern, efficient methods and machinery and our utilization of all waste enable us to furnish marble at a price that makes it available for even those projects where cost must be kept low.

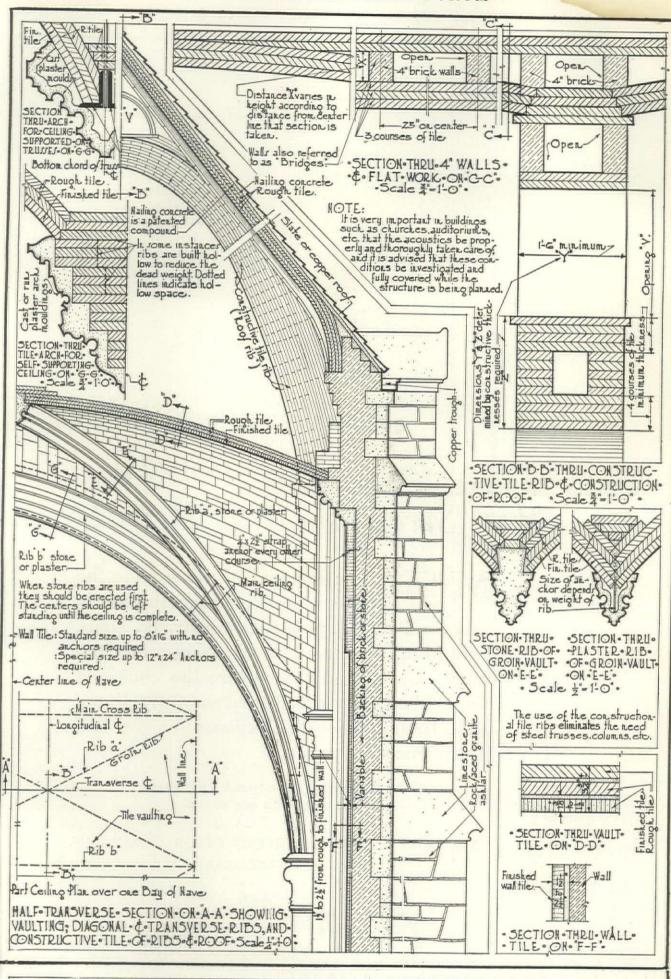
Furthermore, we can quote on foreign marbles advantageously to the buyer because of our import relations with the leading foreign quarries.

Our Service Department, composed of experienced interior marble engineers, will gladly advise with you on any project you think might well include interior marble; or will promptly furnish you with exact cost estimates on any project, specifying interior marble, in which you are interested.



CHIAN MARBLE COMPANY

Knoxville
Tennessee



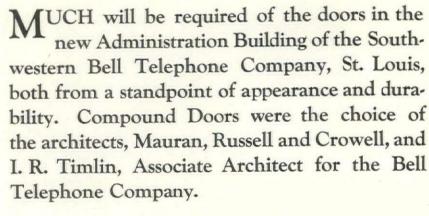
WOBORN, MASS - New york - Boston - Detail Sheet



Administration Building of The Southwestern Bell Telephone Company, St. Louis. Westlake Construction Co., Builders

# Inseparably Bonded

## for Strength and Beauty



Write for sample of Compound construction, and data on cost and design.

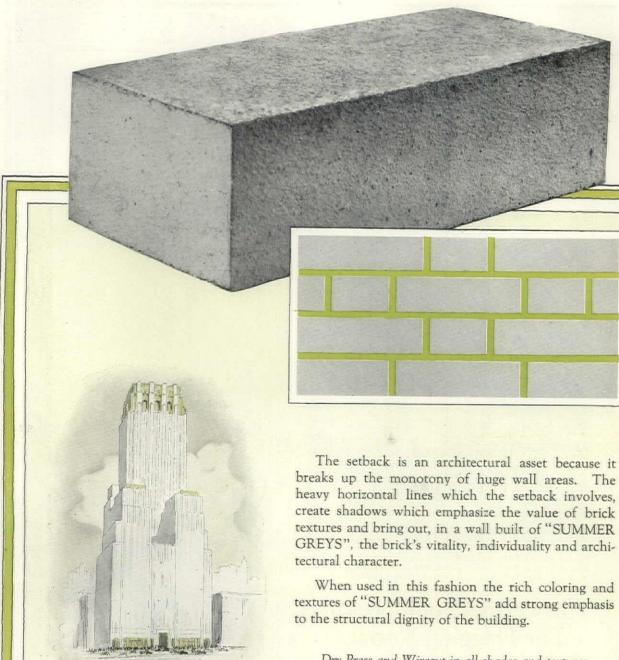
THE COMPOUND & PYRONO DOOR COMPANY
Served DOORS outlive wilding. Panels are five ply.

ST. JOSEPH, MICHIGAN



The cross-sectional view above shows why COMPOUND VENEERED DOORS outlive the building. Panels are five ply. % I taminated, soft wood core. Sawed stile and rail veneers. ½" in thickness—tongued and grooved, doubling the gluing surface and locking veneer and core in an inseparable bond.

MADE BY AMERICA'S OLDEST VENEERED DOOR SPECIALISTS



heavy horizontal lines which the setback involves, create shadows which emphasize the value of brick textures and bring out, in a wall built of "SUMMER GREYS", the brick's vitality, individuality and archi-

When used in this fashion the rich coloring and textures of "SUMMER GREYS" add strong emphasis

Dry Press and Wirecut in all shades and textures

#### SUMMER-GREYS

Worthy to rank with Bradford Reds"

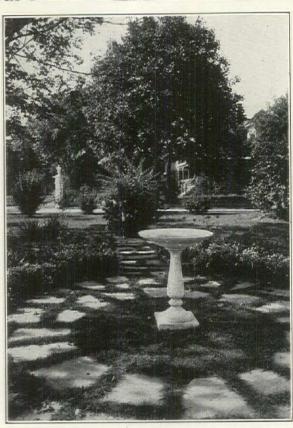


#### HANLEY COMPANY, Inc.

9 East 46th Street, New York City Bradford, Pa.

formerly BRADFORD BRICK & TILE CO. Plants at Bradford, Lewis Run, Summerville, Pa.

# Olde Stonesfield Flagging



Cut to pattern Olde Stonesfield Flagging on grounds of Ernest E. Rogers, Pequot, New London, Conn., Dwight James Baum, Architect, A. Graham Creighton, Associate, Olmstead Bros., Landscape Architects

#### Answering Your Seekings For Flagging Variants

IF you could but come with us to our Extensive Collecting Field, in Vermont, you would at once see how it is we can supply on such short notice, Flagging in all shapes, thicknesses and wide gamut of colorings.

Natural breaks and cleavages are there on every hand. Men are at work shaping the random rectangular. Others are cutting the flagging to fit certain patterns, as they did for the subject above.

Everywhere, you would see vast piles of sorted Olde Stonesfield, which have come direct from Vermont's finest quarries. Quarries, either owned outright or fully controlled by Emack.

Flat stones are one thing. Olde Stonesfield Flagging is quite another. Let's not confuse the two. 23A—Graduated Olde Stonesfield Roofs.

23B-Thatchslate Roofs.

23C-Olde Stonesfield Flagging.





#### THE JOHN D. EMACK CO.

Roof and Flagging Displays at Our Offices

New York Office: 17 East 49th Street

# America Needs More Garages in Her Cities

This very important opportunity for the creation of architectural commissions should engage the attention of architects in every city of over 25,000 population. In the recent past over 100 modern, multi-floor buildings have been erected. That they are exceptionally profitable is a matter of record. To aid you in formulating ideas on this subject we urge you to read "Planning Garages for Profitable Operation." It will be sent, gratis, on request. Ask for the latest "F" edition.



# RAMP BUILDINGS CORPORATION

21 East 40th Street

New York, N. Y.

GARAGE ENGINEERS
CONSULTANTS ON PROMOTION AND GARAGE OPERATION



The Barry Apartments, Chicago, Ill., Robert S. DeGolyer & Co., Architects

#### Delicate Tints in Face Brick

THE Barry Apartments are a striking example of the use of delicate tints in beautiful brickwork. The Face Brick is in light buff. Its color and texture is emphasized by the terra cotta trim.

You will find many splendid examples of the modern use of Face Brick in "Architectural Detail in Brickwork," a portfolio of many halftone plates, showing various treatments of the brick wall surface, ready for filing. It will be sent postpaid to any architect making request on his office stationery.

"English Precedent for Modern Brickwork," a

100-page book, beautifully illustrated with halftones and measured drawings of Tudor and Georgian types and American adaptations, sent postpaid for two dollars.

"Brickwork in Italy," 298 pages, an attractive and useful volume, especially for the architect, profusely illustrated with 69 line drawings, 300 halftones, and 20 colored plates with a map of modern and XII century Italy. Bound in linen, will be sent postpaid upon receipt of six dollars. Half morocco, seven dollars.

#### AMERICAN FACE BRICK ASSOCIATION

1751 Peoples Life Building - Chicago, Illinois



# HEGGIE'SIMPLEX

ELECTRIC-WELDED STEEL BOILERS



JAMES G. HEGGIE who in 1892 founded the Heggie Organization and today is President of the Heggie-Simplex Boiler Co.

## For 34 years Heggie has justified public confidence

THROUGHOUT a third of a century, the organization headed by James G. Heggie has so consistently maintained high quality in the fabrication of boilers and steel plate work of all kinds, and has dealt with such unfailing, unvarying integrity, that it is frequently said in the trade, "If Heggie makes it, it must be right!"

To justify the Heggie name, the Heggie-Simplex boiler had to be outstanding. A boiler whose design throughout is based upon scientific heating principles, free from tradition. A boiler that combines in one portable steel unit the recognized advantages of all earlier types. A boiler built to Heggie standards in every detail, so as to be "The Quality Boiler of the Market."

#### HEGGIE-SIMPLEX BOILER COMPANY, Joliet, Illinois

Akron Albuguerque Amarillo Atlanta Baltimore Birmingham Boston Buffalo Casper Charleston, S.C. Detroit Charlotte Duluth Chattanooga

Representatives in Chicago Cincinnati Cleveland Columbus Dallas Davenport, Ia. Dayton Denver Des Moines

El Paso Evansville, Ind. Fort Wayne Harrisburg Harrisburg
Houston
Indianapolis
Jacksonville
Joliet
Kan. City, Mo.
La Crosse, Wis. Lima, O. Elmira



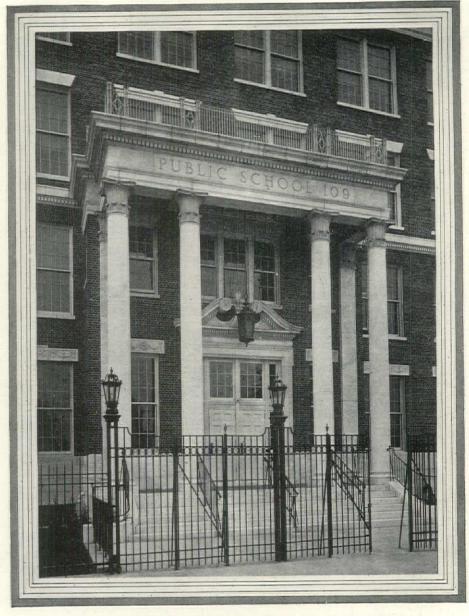
Little Rock Louisville Lubbock Memphis Milwaukee Minneapolis Nashvillo New Haven New Orleans New York Okla. City

Peoria, Ill. Philadelphia Pittsburgh Racine, Wis. Raleigh Rochester Rockford San Antonio Savannah Schenectady Scranton

Omaha

Representatives in Spartanburg Springfield, O. St. Louis Syracuse Tampa Toledo Toledo Tomahawk, Wis. Tulsa Youngstown, O. Washington, D.C. Waterloo, Ia. Shreveport

Just look up "Heggie-Simplex Boiler Co." in the phone book in any of the above cities for representative's number and address



A NEW YORK PUBLIC SCHOOL ENTRANCE PORTICO WM. H. GOMPERT, ARCHT., SUPT. OF SCHOOL BUILDINGS

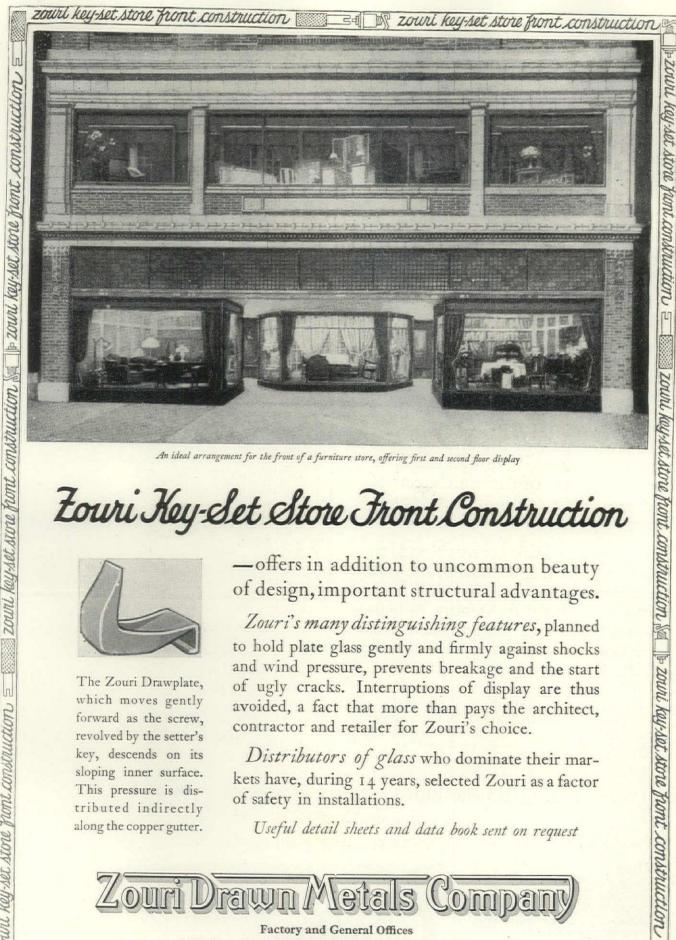
#### PUBLIC SCHOOLS

GEORGIA MARBLE was selected as exterior trim for about thirty-five New York City public schools only after a most careful investigation as to its merits, especially its wearing and weathering qualities.

The portico motive, all trim, and even the steps and door sills are White Georgia Marble. This marble for steps is no experiment; it is recognized as having the wearing qualities necessary for this use.

The Georgia Marble Company, Tate, Georgia; New York, 1328 Broadway; Atlanta, 511 Bona Allen Building; Chicago, 456 Monadnock Building.

# GEORGIA MARBLE



An ideal arrangement for the front of a furniture store, offering first and second floor display

# Louri Ney-Set Store Front Construction



The Zouri Drawplate, which moves gently forward as the screw, revolved by the setter's key, descends on its sloping inner surface. This pressure is distributed indirectly along the copper gutter.

h

1- Zowil Key-set store front construction

-offers in addition to uncommon beauty of design, important structural advantages.

Zouri's many distinguishing features, planned to hold plate glass gently and firmly against shocks and wind pressure, prevents breakage and the start of ugly cracks. Interruptions of display are thus avoided, a fact that more than pays the architect, contractor and retailer for Zouri's choice.

Distributors of glass who dominate their markets have, during 14 years, selected Zouri as a factor of safety in installations.

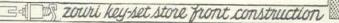
Useful detail sheets and data book sent on request

Factory and General Offices

1608 East End Avenue, Chicago Heights, Illinois

DISTRIBUTORS IN PRINCIPAL

a zouri key-set store front construction



# Announcement of

# An Architectural Competition

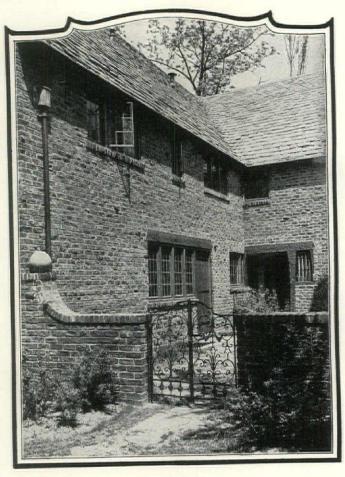
## Photographs and Plans of Common Brick Houses

THIS competition has been simpli-I fied to an unusual degree. It is open to any architect, architectural firm ordesigner. It requires no sketch plans. It calls only for photographs and plans of houses or bungalows already constructed—or completed before the contest closes November 16, 1926.

Thus the contest requires very little time on the part of the architect, yet substantial rewards are offered. The jury will consist of three architects of national reputation in residential design.

The purpose of this competition is to bring together a collection of the best among the many houses being built with Common Brick exteriors. Whenever these photographs are published, the name and location of the architect will be given.

Full details of this competition may be secured by writing the COMMON BRICK HOUSE COMPETITION, care of The Architectural Forum, 383 Madison Avenue, New York.



#### Award List

First Prize .		\$1,000
Second Prize		500
Third Prize.		300
Fourth Prize		100

10 Honorable Mentions at \$50 each

#### THE COMMON BRICK MANUFACTURERS' ASSOCIATION of AMERICA

At Your Service These District Association Offices and Brick Manufacturers Everywhere

Brick Manufacturers Everywhere
Chicago 614 Chamber of Commerce Bldg.
Denver 1735 Stout St.
Detroit, Mich. 400 U. S. Mortgage Trust Bldg.
Hartford, Conn. 226 Pearl St.
Los Angeles 342 Douglas Bldg.
New York City, 1710 Gr'd Cen. Term'l Bldg.
Norfolk, Va. 112 West Plume St.
Philadelphia 303 City Centre Bldg.
Portland, Ore. 906 Lewis Bldg.
Salt Lake City 301 Atlas Blk.
San Francisco 932 Monadnock Bldg.
Seattle, Wash. 913 Arctic Bldg.
Springfield, Mass., 301 Tarbell-Watters Bldg.

2134 Guarantee Title Bldg. Cleveland, Ohio



#### Brick Books for Your Use

"Skintled Brickwork" (15c)

"Brick, How to Build and Estimate"

(25c)

"Hollow Walls of Brick"—FREE [

Check above, and send for any or all of these books.

# Armstrong's Linoleum for every floor in the house



# different from Any Floor You Know

ERE IS LINOLEUM that has not only color, pattern, luster—but more. It has actual texture—a rich embossed effect of old hand-set ceramics. Each unit in the design is actually raised above the surface. It is an entirely new Armstrong achievement in linoleum manufacture.

The colors include soft, pastel shadings of heather browns, dusk blue-greens, tapestry tans, and rugged brick reds. The designs are not repeated regularly, but are varied in a pleasing handcraft manner. Heraldic and for interiors you may be planning.

figured emblems inserted here and there complete the Old-World effects in this modern floor material.

Here is a real achievement in floor beauty that merits your consideration when you plan your next home or business project. Our Bureau of Interior Decoration will gladly send you, by return mail, generous-

size quality samples and colorplates of these Cook for the new Embossed Tile Inlaid Linoleum designs, as well as other linoleum floor suggestions the burlap back

Armstrong Cork Company, Linoleum Division, Lancaster, Pennsylvania

# Grand Spires of Commerce in Weatherproof Face Brick

The Esperson Building Houston, Texas IOHN EBERSON, Architect AMERICAN CONSTRUCTION COMPANY, Builders

No material is more adaptable nor expressive of subtle texture and mellow colorings than Face Brick.

The Esperson Building is faced with Acme Perla Weatherproof Brickselected by architect and owner for color, texture, durability, simplicity and strength.

We are manufacturers of the products we sell and make "a brick for every type—a color for every color scheme."

## Acme Brick Company

Manufacturers

#### Plants-Owned and Operated

Bennetts and Denton, Texas. Fort Smith, Little Rock, Malvern, Perla and Pine Bluff, Arkansas Cleveland, Oklahoma City and Tulsa, Oklahoma

#### Capacity 170 Million Brick Annually

#### Offices and Display Rooms (Where Your Color Schemes Can Be Solved)

Abilene, Texas Alexandria, La. Amarillo, Texas Beaumont, Texas Corsicana, Texas Dallas, Texas Ferris, Texas Ft. Smith, Arkansas Fort Worth, Texas Galveston, Texas Houston, Texas

Lake Charles, La. Little Rock, Arkansas Memphis, Tennessee New Orleans, La. Oklahoma City, Okla. Port Arthur, Texas San Antonio, Texas Shreveport, La. Tulsa, Oklahoma Waco, Texas Wichita Falls, Texas

# yes, insulation now pays for I ITSELF!

Our new product is all wood, not a substitute. A new process now produces perfected manufactured lumber for structural insulation.

It goes up with greater rapidity and efficiency than old-fashioned sheathing-insulates and deadens sound at the same time. And there is no waste. It is a perfect plaster base, eliminating lathor interior finish ready to receive decoration, no plaster required.

#### What's Its Name?

What is the name of this new product? Its name is destined to be one of the most important in the building field. The men behind it (\*) will announce the name in an early issue of this publication.

#### STRUCTURAL INSULATION

USED FOR SHEATHING, the new all-wood product adds to the

strength and permanence of any structure. It insulates and deadens at the same time, and to an unexcelled degree. This we are prepared to prove by test and example.

WE GUARANTEE IT for superior insulating qualities. We would like to send you a sample.

SEND FOR DETAILS concerning this all-wood manufactured lumber-its discovery, its manufacture, its many profitable uses, the men behind it. We will send you complete information, including sample, if you will send us your name and address.

MASON FIBRE COMPANY Dept. 608 111 W. Washington St. CHICAGO, ILL.

#### The men behind it

These are the officers, directors and executives of the Mason Fibre Company. You know them. They endorse the new product with enthusiasm.

S. B. BISSELL, Treas. Wausau Southern Lumber Co., Treas. Marathon Lumber Co.; W. H. MASON, inventor of the process; BEN ALEXANDER, Vice-Pres. Silver Falls Timber Co.; AYTCH P. WOOD-SON, Sec. Yawkey-Bissell Lumber Co., Sec. B. C. Spruce Mills, Sec. Wausau Southern Lumber Co., Sec. Marathon Lumber Co.; BROWN KATZEN-BACH, C.P.A.; CHARLES GREEN, Pres. Eastman, Gardiner & Co.; M. P. McCULLOUGH, Vice-Pres. Brooks & Ross Lumber Co., Vice-Pres. B. C. Spruce Mills; A. J. GLASSOW, Mgr. Wausau Southern Lumber Co.; D. C. EVEREST, Sec. and Gen. Mgr. Marathon Paper Mills Co.; R. G. WALLACE, Gen. Sales Mgr., formerly Vice-Pres. and Gen. Sales Mgr. Natco Hollow Tile.



# 60 apartments

#### get perfect electric refrigeration from three Coldak machines in the basement

THE building shown above is the Lexington and Concord Apartments, in Somerville, Mass. It was designed by Arthur H. Bowditch, the well-known Boston architect.

This building contains sixty apartments. These apartments all get perfect refrigeration from only three Coldak machines, installed as a unit in the basement.

No other system is like it. Coldak was developed especially for apartment houses. It is a system that supplies refrigeration to as many as 25 apartments from one machine—just as one heater supplies many radiators. And the Coldak System can be expanded indefinitely—two machines for 50 apartments, three machines for 75 apartments, etc.

The advantages of the Coldak System are apparent when compared with other refrigerating systems.

No similar system can supply more than 6 apartments from *one* machine located in the basement.

Brine circulating systems are vastly more expensive. The cost of installing the Coldak System is only a fraction of the usual cost of a brine installation. The life of Coldak is infinitely longer, because the refrigerant used will not eat away the pipes.

Individual installations in each apartment cannot be compared with Coldak. They make it necessary to install all the machinery in the kitchen. With Coldak all the machinery is installed in the basement, out of the way. No machinery in the living quarters. No noise or service calls to annoy the tenants. They get perfect refrigeration as conveniently as they get light, water and heat.

If the smaller Coldak, however, were installed individually in each apartment, they would still have the advantage of *quiet*. And the older a Coldak grows, the quieter it becomes.

The operating cost of the Coldak System is much less than that of individual installations. Coldak's cost is more than offset by the increased rental value of the apartments.

#### Few parts—low service cost

The simplicity of the Coldak machine has reduced the service cost to less than *half* that of other machines. Coldak has no belts, pulleys, pistons, crankshafts, reduction gears or reciprocating valves. A simple, two-stage helical gear compressor, directly driven by the motor at motor speed, does the job.

#### Coldak costs less to install

With Coldak, the refrigeration takes place *only* inside the ice boxes. The pipes are small and require no insulation. That makes installing easier. The initial cost is lower. The current consumed is less. And once Coldak is installed, it requires little attention other than an

occasional oiling of the motor. The oil in the compressor requires changing only about once every two years.

Coldak is the one ideal system of electric refrigeration for apartment houses. It is the last word in making the new apartment house completely modern—and an easy means of bringing old apartment houses up to date.

#### Coldak for private homes and commercial uses

The Coldak Household System offers advantages that are equally outstanding. The first Coldaks installed over six years ago are still giving satisfactory service. There is a Coldak model for every size home.

For stores dealing in perishable goods, the Coldak Commercial System offers revolutionary economies and conveniences. The one system makes possible different degrees of temperature in different compartments.

## Coldak managed by J. G. White Management Corporation

The Coldak Corporation secured the services of the J. G. White Management Corporation after the Coldak System had demonstrated its superiority over other types of electric refrigeration.

The services of the Coldak engineers are available to any architect. Suggestions will gladly be given about installing the Coldak System in any building, proposed or already completed.

# Note these Specifications

These specifications apply to the Coldak Electric Refrigerating System for apartment houses:

CAPACITY PER COMPRESSOR—At 12° F. boiling temperature of the refrigerant, and with the cooling water at 70° F., the refrigerating effect is equivalent to the melting of 1100 pounds of ice per day.

Refrigeration—Direct expansion. Float valve controlled chilling units, connected in multiple. Unoccupied apartments may be cut off.

Compressor—Two-stage helical gear—straight line.

Motor-2 H.P., 1200 R.P.M.

Control.—Automatic back-pressure control.

Refrigerant—No unpleasant odor, harmless and noncorrosive.

DISTRIBUTION—Refrigerant distributed through \(^3\)/6-inch liquid food lines and 1-inch gas return lines. No insulated pipe lines.

SAFETY DEVICES—Automatic safety valve, out-door purge, automatic overload cutout switch, high-pressure stop switch, water failure stop switch, shut-off valves on all main lines and to each apartment.

# COLDAK

Eight West Fortieth Street, New York City

# You should have this Coldak booklet

A Coldak booklet, containing more detail information about the Coldak System for apartment houses, will be sent to you if you desire a copy. Just fill out the coupon or attach it to your letterhead.

11.1	© 1926, C. C.
	Coldak Corporation, A. F. 8-26
	Eight West Fortieth Street, New York City.
	Please send me a copy of your booklet on the Coldak Electric Refrigerating System for apartment houses.
	Name
	Address
	City

The Arch of Titus, Rome





The Modern Flexlume Electric Sign

#### The Function of the Sign was Recognized Even in the Early Ages of Architecture

In the early ages buildings, arches and market places were deemed incomplete without the actual incorporation of ideographic or lettered legends to render their purpose more definite.

Because of commercial activity the sign today is a recognized essential of modern architecture. Designers realize the importance of including in their original plans definite provision for the public message, written in clean-cut letters of translucent white by day and glowing beauty by night.

In the moulded glass letter and

variety of background the Flexlume Electric Day-and-Night Sign has a sufficient degree of flexibility to render it easily adaptable to the architect's pencil—to be made an attractive component of the building's exterior.

"Signs and Inscriptions in Architecture" is a 40-page authoritative book that gives suggestions for correct architectural lettering of signs and inscriptions on modern buildings. If you have not received a copy, have your secretary

write us today.

Communicate with our Department of Design for intelligent cooperation whenever you have a sign problem to solve.



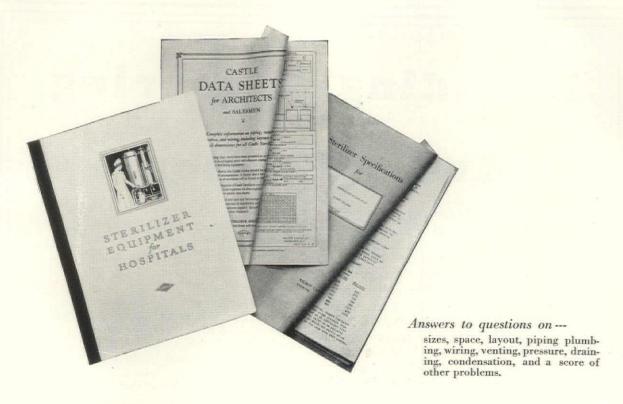
1420 Military Road

Buffalo, N. Y.

Flexlume Offices in All Principal Cities







# Three publications you need in your files.

A complete set of Data Sheets, Full Specifications, and the most comprehensive and detailed catalog comprise this new set.

They have been arranged by Castle engineers for your especial help in all hospital sterilizer installations. They answer the hundred and

one questions on piping and space requirements that heretofore have been everywhere except in your own office.

The information is scientifically arranged in compact form for ready reference. Your set will be sent at once if you fill in the form below.

They strip the aggravations from hospital sterilizing specifications.

# CASTLE

Sterilizers for Hospitals, Physicians, Surgeons and Dentists
WILMOT CASTLE Co., 1209 University Ave., Rochester, N. Y.

Please send your set of Hospital Sterilizer Data to

Attention of

Firm

Mail this to Wilmot Castle Co., 1209 University Ave., Rochester, N. Y.

Address



# Moulding's Flooring **Every Purpose**

THE ARCHITECTURAL FORUM

HEMICAL and engineering research in our laboratory have made Moulding's Floors not only the best for general foot traffic and hard wear, but the very floors to specify for many exacting and special requirements. These floors are all scientifically manufactured and laid in the most approved manner. Every floor is fully guaranteed by us. In thousands of buildings Moulding's Flooring is giving satisfactory service.

#### T-M-B Flooring

A permanent quiet flooring with a durable, rubber-like texture. It is applied over cement or wood, forming a seamless sanitary surface easy to clean. It gives distinctive beauty at a cost often less than for other floorings. Made in red, brown, green and black. Used in all kinds of buildings.

#### T-M-B Acid Resisting Flooring

A special compound of T-M-B flooring where protection is desired from acids, alkalies and water. In laboratories of schools, colleges and industrial plants T-M-B Acid Resisting Flooring has proved its ability to give long service under severely adverse conditions.

#### T-M-B Electrical Insulating Flooring

Specially compounded to serve as a flooring that guarantees perfect electrical insulation. It is also waterproof and seamless. Extensively used by public utilities and in electrical laboratories of schools and colleges.

#### Dance Floor

Applied over any cement or wood surface, resulting in a smooth floor easily waxed to the desired slipperiness. Available in several colors. Unaffected by rain, snow, heat or cold. Used as outdoor dance floor in many leading amusement parks throughout the country.

#### Outdoor Floor

Composed of imperishable minerals that successfully defy frost, heat, rain and snow. Ideal for roof gardens, porches, roofs used for recreation, etc.

#### Moulstone

A permanent fireproof floor for stores, lobbies, reception rooms, toilets and offices. An ideal flooring for making new floors over old ones. In variety of colors, permitting border, panel and inlay design. Can be scored to resemble tile. Applied over cement, wood subfloors or old wood floors.

#### Moultyle

A resilient tile floor of unusually durable texture. Green, red, brown and green tiles afford almost any combination

#### THOS. MOULDING BRICK COMPANY

133 W. Washington St. CHICAGO, ILL.

Grand Central Terminal Bldg. NEW YORK, N. Y.





MADE, LAID AND GUARANTEED BY US-60 YEARS OF RESPONSIBILITY





FIVE MINUTE SERVICE

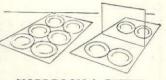
Should attention be required the Copeland service man or the janitor merely lifts the unit out and substitutes a loaned unit in almost the same length of time that it takes to fill the average refrigerator with ice.



STORAGE DRAWER

The large vegetable or storage drawer is a convenient accessory. When in position, under the refrigerator, the food compartment is raised twelve inches.





MORE ROOM for DISHES

On the left, the wide, unobstructed Copeland shelf, holding six dishes. On the right, two narrow shelves of an ordinary refrigerator which, because of the partition, hold only four dishes.



MORE ICE CUBES

More ice — 108 cubes can be frozen at one time. The double depth drawer is also used for delicious frozen desserts, salads and bouillon.

COPELAND ELECTRIC REFRIGERATION

The radically different design of the new model Copeland Electric Refrigerator, with both machine and cooling compartment forming a single removable unit at the top of the box, makes possible better refrigeration, greatly increased food space, a larger number of ice cubes, simple installation and "five-minute" service.

Measuring only 26¼ inches in width, 21 inches in depth and 62½ inches in height, the new model Copeland requires very little floor space. Yet the commodious, unpartitioned food chamber with wide,

unobstructed shelves affords ample storage space for the average-size family.

Built of the finest sheet steel, insulated with solid corkboard and finished in white Pyroxylin, it maintains throughout, the same high standard of quality that characterizes thousands of other Copeland models giving satisfactory service in American homes today.

The retail price of the new model Copeland is lower than that of any other complete electric refrigerator. We shall be pleased to quote quantity prices and to furnish detailed specifications.

COPELAND PRODUCTS · INC...630 LYCASTE STREET · DETROIT · MICHIGAN

ACID - ALKALI - AND - FLAME - RESISTANT

NON - ABSORBENT

NON-CONDUCTING

# For The Laboratory

IN SPECIFYING Alberene Stone for the table tops, shelving, sinks, drain boards, fume hoods, etc., the designers of the Baker Chemistry Laboratory of Cornell University (pictured to the right) chose the one preeminent material for laboratory use-the material used, because of its unique qualities, in 90% of the laboratories built in the past 20 years. As a matter of fact, there is no substitute for Alberene Stone as a laboratory material, whether on grounds of durability, workability or economy.

> Write for the Catalog, describing the advantages of Alberene Stone for laboratory use and also for stair treads, sanitary work and electrical uses.





The Alberene Stone Laboratory Equipment here pictured in the Baker Chemistry Laboratory is in keeping with the high archi-tectural and technical standards maintained throughout

QUARRIED FOR OVER 40 THE INDESTRUCTIBLE MATERIAL FOR LABORATORY USE

STANDARD ALSO FOR TOILET, URINAL AND SHOWER PARTITIONS, STAIR TREADS, ELECTRICAL CONSTRUCTION

FOR NEARLY THREE QUARTERS OF A CENTURY

THE WORLD'S WORD **ELEVATOR SAFETY** 

OTIS ELEVATOR COMPANY OFFICES IN ALL PRINCIPAL CITIES OF THE WORLD



NEWEST LINING TIGHTEST

SLATE AND TILE ROOFS



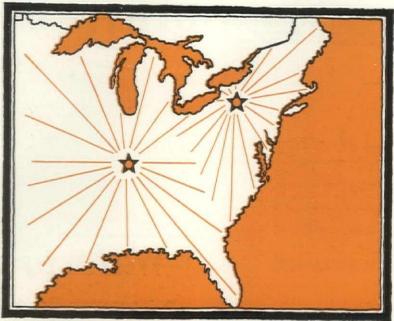
#### HYDREX DOUBLE-LAYER ROOFING FELT

PROVIDES insulation and waterproofness. Consists of two sheets of coated felt and between the two felt sheets a layer of Asphaltic Compound to make the nail holes tight-especially in the valleys. Used on the highest class structures. Samples and data on request.

HYDREX ASPHALT PRODUCTS CORPORATION

Waserproof Cloth, Canvas, Burlap, Insulating and Building Papers, Roofing, Sound-Deadening Felt, Paints, Asphaltz, Etc.

120 Liberty Street, New York



# All the East can now have BRIXMENT

THE use of BRIXMENT has grown to such proportions that we have had to build another large-capacity mill to supply the increasing demand. This new mill, located at Brixment, N. Y. (formerly Akron Falls), now puts BRIXMENT within easy reach of every city in the east . . . . Architects in charge of operations there who know, by experience, the architectural, structural and economic advantages of BRIXMENT will appreciate the importance of this announcement . . . . To those who are not yet acquainted with BRIXMENT we shall be glad to send a copy of our architect's handbook (8½ x11 inches with filing tab) containing specifications, data and tests and telling how BRIXMENT insures masonry of unusual strength, permanence, beauty and economy.

Advantages of BRIXMENT

BRIXMENT is a mason's cement of a uniform strength equal to that of the brick it binds .... Spreads fast, smooth and buttery and insures better, more accurate joints in less time and at less cost .... Repels moisture. Does not fade mortar colors .... No lime. No slaking. Can be used as soon as mixed .... Its approval by prominent and exacting architects is evidence that BRIXMENT is filling the need of an improved, economical mortar material. LOUISVILLE CEMENT CO., Incorporated, General Offices, Louisville, Ky.



#### Some BRIXMENT Buildings

New York Times Annex, New York City. Ludlow & Peabody, Architects; George A. Fuller Company, General Contractors.

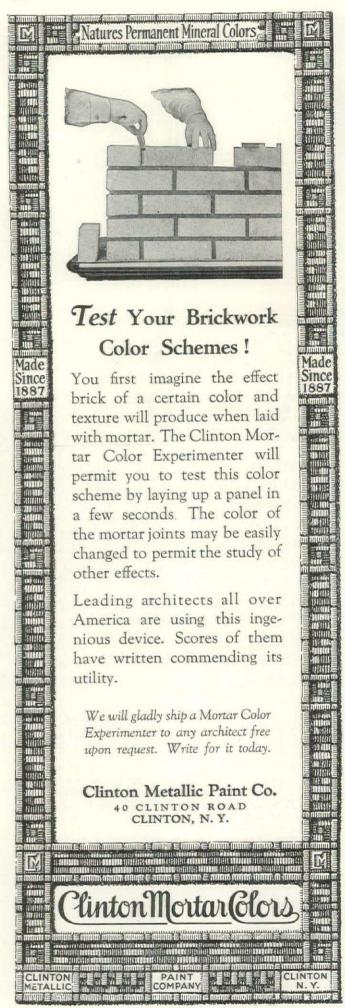
United States Railway Terminal Post Office, Chicago. Graham, Anderson, Probst & White, Architects; R. C. Wieboldt Co., Contractors.

Biltmore Hotel, Miami. Schultze & Weaver, Architects; Thompson-Starret Co., General Contractors.

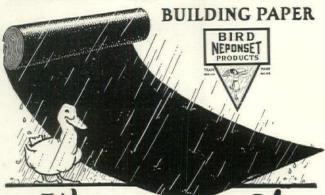
Gates Circle Apartments, Buffalo. H. L. Stevens Co., Architects and Contractors.

Cement Manufacturers for Nearly a Century

BRIXMENT for Perfect Mortar



# BIRD'S NEPONSET BLACK



Waterproof!

Neavy Waterproof Building Paper that keeps out dampness and drafts. Its glistening, asphalt-coated surface sheds water like a duck's back.

For a permanent barrier against the elements, specify Bird's Neponset Black. Over roof boards and under slate, tile, metal or asphalt shingles it makes a watertight covering. When placed back of stucco and under clapboards or shingles it keeps out drafts and dampness and makes the heating of the house more economical.

Your contractor or builder can get Neponset Black at a moment's notice. It is standard stock with dealers in Bird's Building Products. Refer to Sweet's or write to us for complete specifications.

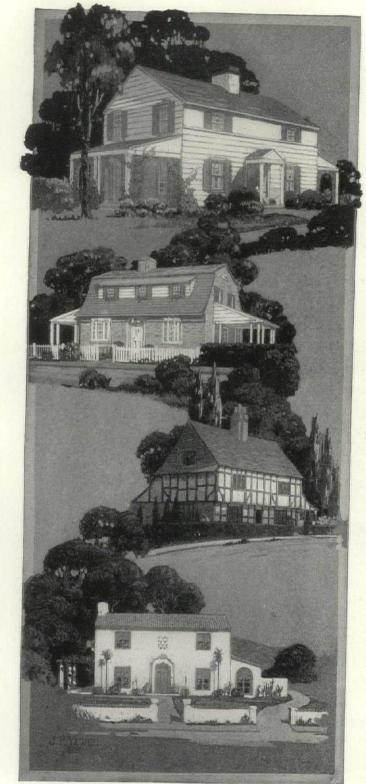
#### BIRD & SON, inc.

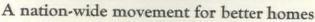
Established 1795 EAST WALPOLE, MASS.

Chicago Office and Plant: 1472 West 76 Street New York: 295 Fifth Avenue Canada: Bird & Son, Ltd., Hamilton, Ont.

Manufacturers of

NEPONSET TWIN SHINGLES
PAROID ROOFING
Bird's Asphalt Shingles
Bird's Design Roofing
Bird's Neponset Black Building Paper
Bird's Neponset Rugs
and Floor Coverings





In the July issue we illustrated the first of the model homes being built with the co-operation of these leading building and equipment manufacturers under our supervision. Additional homes are shown above; each

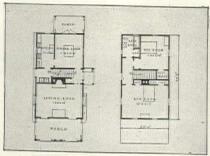
has been designed by a registered Architect.

A total of thirty-six of these model homes will be demonstrated to the public in approximately twenty-

eight cities this year, thus educating the home-seeker toward better architectural planning and better building as well as fostering an appreciation of the permanent investment value of good equipment.

Under the supervision of

HOME OWNERS' SERVICE INSTITUTE · INC. L. PORTER MOORE, President



@ Home Owners' Service Institute, Inc.

#### These Model Homes built and equipped with-

Blue Star Installation Domestic Gas Appliances American Gas Association

Anaconda Brass Pipe and Bronze Screen Wire The American Brass Company

Corto Radiators—Ideal Arco Boiler
—Arco Hot Water Tank
American Radiator Company

Anaconda Copper Gutters, Leaders and Flashings Anaconda Copper Mining Company

Muralia Wall Papers
BAECK WALL PAPER COMPANY

True-Tye Bridging and Steel Forms for Concrete Construction BLAW-KNOX Co.

Celotex Insulating Lumber
THE CELOTEX COMPANY

COMMON BRICK MANUFACTURERS Association of America

Nairn Gold Seal Inlaid Linoleum Congoleum-Nairn, Inc.

Locks and Builders' Hardware P. & F. CORBIN Plumbing Materials CHANE CO.

Radio Receiving Sets and Equipment THE CROSLEY RADIO CORPORATION

Fenestra Casement and Basement Steel Windows DETROIT STEEL PRODUCTS CO.

Tontine Window Shades, Duco Furniture Finish, Rug Anchor E. I. Du Pont de Nemours & Co., Inc.

Fairfacts China Bathroom Accessories The Fairfacts Company, Inc.

Address

G-E Wiring System
GENERAL ELECTRIC COMPANY

Graybar Clothes Washer Graybar Electric Company, Inc. The Greater Hoover Suction Sweeper
THE HOOVER COMPANY

Tiger Finish (Hydrated Lime) Walls Kelley Island Lime & Transport Co.

Kernerator Chimney-Fed Incinerator Kerner Incinerator Company

Lehigh Portland Cement Lehigh Portland Cement Company

Long-Bell Trade-Marked Lumber and Oak Flooring The Long-Bell Lumber Company

The Minneapolis Heat Regulator for Coal, Gas, Oil
MINNEAPOLIS HEAT REGULATOR CO.

Natco Hollow Building Tile National Fire Proofing Company

Dutch Boy White-Lead for Interior and Exterior Painting National Lead Company

Miracle Doors
Paine Lumber Company, Ltd.

Richardson Multicrome Roofs
THE RICHARDSON COMPANY
Riddle Decorative Lighting Fitments
THE EDWARD N. RIDDLE COMPANY

Servel Electric Refrigeration
The Servel Corporation

Smoothtop Gas Range
Standard Gas Equipment Corp. Valspar Varnishes, Varnish Stains, Enamels Valentine & Company

Kitchen Maid Standard Unit System of Kitchen Equipment
WASMUTH-ENDICOTT COMPANY

#### Every Architect should have this manual on file:

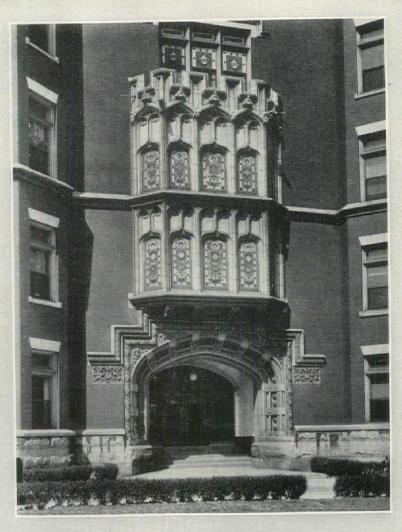
It contains 48 pages of perspectives and floor plans of these model homes and other helpful advice to home builders on how to make the home a model in every

way. It is free on request to every registered Architect. Simply fill in the coupon

HOME OWNERS' SERVICE INSTITUTE, INC. 441 Lexington Ave., New York City Dept. T-7

Please send me, without cost or obligation-"A MANUAL OF HOME BUILDING."

Name_		



Entrance, St. Ann's Asylum, St. Louis, Mo., Barnett, Haynes & Barnett, Architects. Entrance and window trim of unglazed buff Terra Cotta.

#### TERRA COTTA

#### For Effective Entrances

For institutional buildings whose funds do not admit costly architectural treatment, Terra Cotta will provide handsome enrichment at a moderate expense.

The Terra Cotta entrance and surmounting bay windows of the building shown above illustrate the possibility of effectively dignifying institutional buildings in this way.

Beautiful motifs will be found in our volume "Terra Cotta of the Italian Renaissance" containing 200 plates, \$3.00 per copy.

#### NATIONAL TERRA COTTA SOCIETY

19 West 44th Street

New York, N. Y.

# GRATING AND TREAD



#### Take STRENGTH, For Instance.

The main bars are not cut, punched, or otherwise deformed below the neutral axis, and therefore can resist up to the yield point for the full cross-section of the bars. The curved slots in the upper part of the main bars are filled solidly by the cross bars; hence, the compressive resistance of the main or load-carrying members is not altered or changed in any manner.

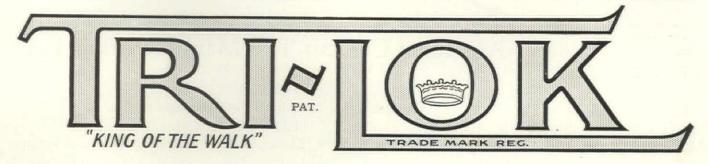
The cross bars reduce the deflection of the grating to a minimum. Tests in Columbia University, University of Pennsylvania, and

Pittsburgh Testing Laboratory have proven that the joints of Tri-Lok are not affected in any way even after the yield point. Hence the joints are stronger than the steel itself.

Can you say so much for the grating you have been using? Certainly not, because never has there been another grating such as Tri-Lok.

Write for our Bulletin which tells the complete story of Tri-Lok's greater economy, durability, and strength.

THE TRI-LOK COMPANY · 5517 BUTLER STREET · PITTSBURGH, PENNA





CEMENTILE On Your Building Takes Roofing Off Your Mind

JOU can forget about your roof after Cementile is laid Y on the purlins. An assuring situation, especially when your building houses valuable equipment or machinery, which demands Absolute Protection.

The Power House pictured above—Georgia Railway and Power Co., Tugalo, Georgia — containing important electrical equipment, the value of which runs into seven figures is roofed with Interlocking Red Cementile. Because of previous satisfactory roof service over a period of 12 years on their Tallulah Falls Power House, this company again chose a Cementile roof, fire-proof, weather-proof, free from maintenance, permanent; the most economical roof from any point of view.

"Bonanza" Cementile is proving its efficiency and permanency on hundreds of Industrial Buildings-mills, factories, etc.—and on garages, piers, schools, theatres, banks, etc.

> Send the coupon for Important Roofing Data

"CEMENTILE" comes in three types: Red Interlocking for pitched roofs; Flat and Channel for flat or pitched roofs where it is desired to waterproof with a composition cov-ering.

'CEMENTILE" is laid directly on

American	Ceme	ntTile Mfg.	Co.
801 Oliver	Bldg.,	Pittsburgh,	Pa.

Please send me "Cementile" Literature containing Industrial Roofing Engineering Data:

Name

Company

Street .

City.

#### American Cement Tile Manufacturing Co. 801 Oliver Building, Pittsburgh, Pa.

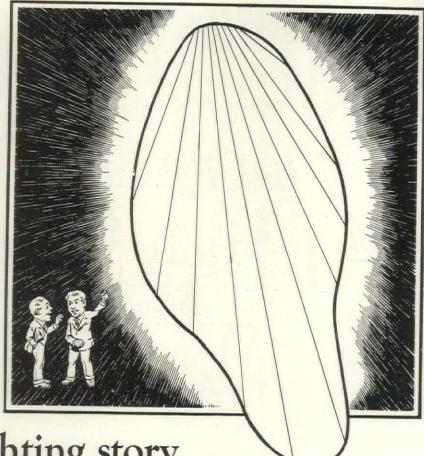
PLANTS:

Wampum, Pa., Lincoln, N. J., Birmingham, Ala.

OFFICES:

Pittsburgh ' New York ' Philadelphia ' Birmingham ' Atlanta

A distribution curve like this is no joke to the man working in misapplied light. The Graybar Electric Lighting Manual shows you how to correct such lighting conditions.



A lighting story with too much point

> SAVE in rare instances, this light distri-bution curve tells a story painful to the eyes,—a story of concentrated glare from a wrongly selected lighting unit. And industry, aroused to the economic danger in poorly selected fixtures, is demanding authoritative information on lighting.

> The architect is particularly well situated to give this information—and the Graybar Electric Lighting Manual to give it to him. For here is shown, in concise form, complete installation data for every type of business, industrial and home lighting. Fixtures for proper light distribution are shown-and the Graybar distributing house nearby has those

fixtures in stock.



ELECTRICAL SUPPLIES

Successor to Western Electric Supply Dept.

Offices in 58 Principal Cities. Executive Offices: 100 East 42nd Street, New York

# Rederal Roofs

link light weight
with High Strength

HEN you roof with Federal Cement Tile, you effect substantial savings on the steel super-structure or frame.

That is due to Federal Tile's light weight.

Because these pre-cast slabs are quality controlled, accurately reinforced with wire mesh, and thoroughly cured under uniform temperature conditions, they link this light weight with high strength.

And you are sure of the same permanent freedom from repairs that Federal Roofs have been providing on industrial and public buildings of every type for a quarter of a century.

Made of concrete, these roofs are fire-proof and rustproof. They are also freeze-proof and sun-proof. They are unaffected by gases, by smoke, or by acid fumes.

Let us tell you the full story of Federal Roofs, and of the engineering and erection service that goes with them. Your request will be given prompt, courteous attention without placing you under any obligation.

Made, Laid and Guaranteed by the
FEDERAL CEMENT TILE COMPANY
608 South Dearborn Street, Chicago, Illinois

FEDERAL
CEMENT TILE ROOFS

"For Every Type of Permanent Building"

federal Interlocking Tile for pitched surfaces have a non-fugitive, red color and require no painting. When used with Federal Glass Insert Tile for toplighting an ideal "daylight roof" is obtained. Other styles include Flat and Channel Slabsforroof decks



# Floors that play an important part in securing decorative unity

Where wide doorways permit an unobstructed vista from room to room, the floor area may be made the connecting decorative link.

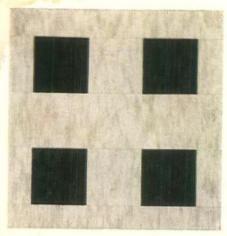
In the interior above, a *Belflor Inset Tile* pattern with grey field and tiles of mottled green and black provides the unifying note. A border of solid black gives the finishing touch and serves to frame the three rooms in one delightfully harmonious picture.

Not only does this floor "tie together" entrance hall, living room and dining room but it is a decorative asset in each room. Nairn Gold Seal Inlaids form a handsome background for furnishings in any type of interior. And in the wide variety of patterns there are many appropriate designs for the modest home as well as for the mansion.

Gold Seal Inlaids have practical advantages that recommend them to architects and home-owners. They can be installed over old as well as over new floors at a moderate cost. They never need expensive refinishing and they can be kept immaculate with minimum care. Their steadfast durability is assured by the Gold Seal guarantee and the name Nairn, which is synonymous with quality.

(See next page)

# GOLD SEAL INLAIDS

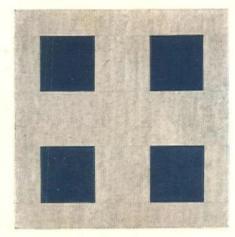


GOLD SEAL INLAID

Belflor 4½" Inset Tile Pattern No. 2152/3



Gold Seal Inlaid
Belflor 4½" Inset Tile Pattern No. 2152/1



GOLD SEAL INLAID

Belflor 4½" Inset Tile Pattern No. 2152/2

THE Belflor Inset Tile patterns of Nairn Gold Seal Inlaids provide resources for giving character and distinction to almost any interior. Home-owners quickly see the artistic possibilities and practical qualities of these permanent floors.

The widespread use of Belflor Inset Tiles in living rooms, halls, dining rooms and sun parlors is silent, but convincing testimony that the manifold advantages of inlaid linoleum are no longer confined to the service rooms of the house.

Period furniture which is so much the vogue today lives most amicably in a room with a Belflor Inset Tile floor. Colonial and modern furniture, too, fit in with the colorful designs. The decorative value of Belflor Inset

Tile Pattern No. 2152/3 (shown above) is illustrated on the reverse of this page.

In durability, finish and flexibility, Belflor Inset Tiles set a high standard. Every tile is cut and set with mathematical precision, which insures that lengths can be laid side by side with certainty of a perfect match. Two sizes of tiles are available—4½ inches and 6 inches square. Thus the proportions of the pattern in the floor can harmonize with those of the room.

We will be glad to send you "life size" reproductions of any Gold Seal Inlaid pattern as well as samples of the actual goods.

CONGOLEUM-NAIRN INC.

Philadelphia New York Boston Chicago Kansas City Atlanta Minneapolis Cleveland Dallas Pittsburgh San Francisco New Orleans

(See preceding page)

# GOLD SEAL INLAIDS

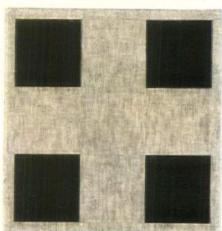
Gold Seal Inlaid

Belflor 6" Inset Tile Pattern No. 2155/1



GOLD SEAL INLAID

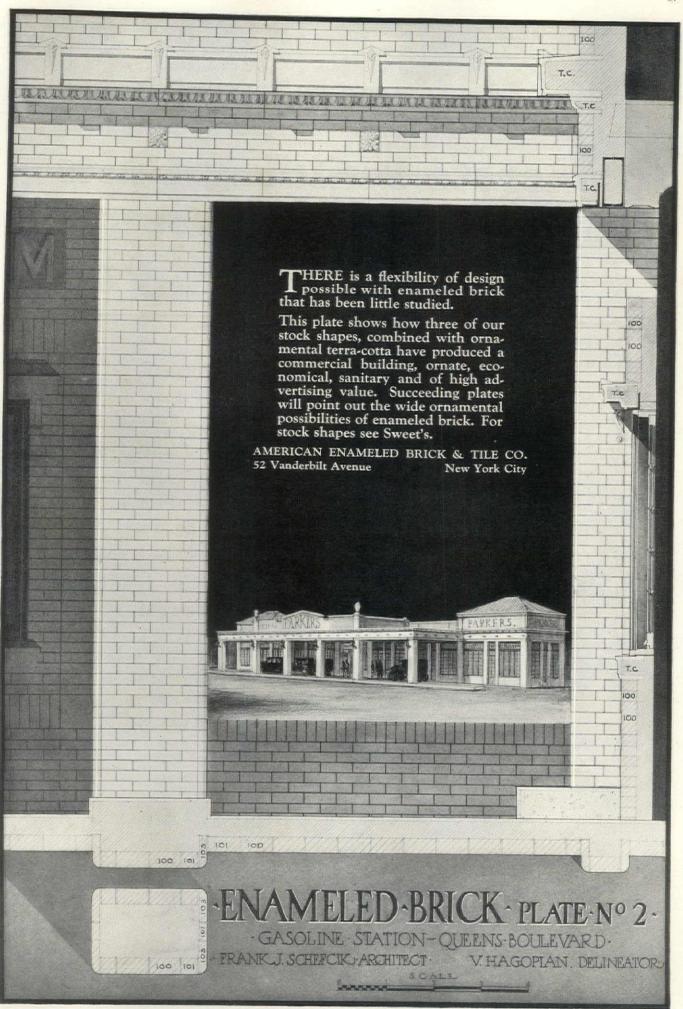
Belflor 6" Inset Tile Pattern No. 2155/4



Gold Seal Inlaid

Belflor 6" Inset Tile Pattern No. 2155, 3





Fire takes 15,000 lives yearly

# Concrete Building Units Establish New Masonry Standards

Once the masonry home was considered beyond the means of the average purse. That is no longer true.

Concrete building units have introduced new economies in masonry construction. Everywhere today you see homes being built with concrete tile or concrete block. These express fully the inbuilt value always recognized as characteristic of masonry.

Concrete building units assure you a home of enduring strength, firesafeness and economy.

With portland cement stucco exterior finish in any one of a wide variety of colors and textures, the beauty of any admired type of architecture is easily secured.

Ask for your free copy of "A Book of Beautiful Homes"

### PORTLAND CEMENT ASSOCIATION

A National Organization to Improve and Extend the Uses of Concrete

Atlanta Birmingham Boston Chicago Columbus Dallas Denver Des Moines Detroit Indianapolis Jacksonville Kansas City Lincoln, Nebr. Los Angeles Milwaukee Minneapolis Nashville New Orleans New York

Oklahoma City Parkersburg Philadelphia Pittsburgh Portland, Oreg. Richmond, Va.

Salt Lake City
San Francisco
Seattle
St. Louis
Vancouver, B. C.
Washington, D. C.



# Bringing Rust into the House

THIS illustration is used in one of a series of advertisements appearing in magazines of national circulation to impress upon home builders the waste entailed through the use of corrodible metal where Copper, Brass and Bronze serve more economically.

The reader is reminded that if iron and steel are used, rust is, in effect, being brought into his new house; but that if pure Copper, Brass, and Bronze are used, the house will be rust-proof inside and out, and periodic painting, repairs, and replacements will be entirely unnecessary.

A collateral purpose of this advertising is to help bring into the small house field the appreciation of sound, permanent building materials which the architectural profession has established so generally for more pretentious buildings.

#### THE AMERICAN BRASS COMPANY

GENERAL OFFICES: WATERBURY, CONNECTICUT
Offices and Agencies in Principal Cities
Canadian Mill: ANACONDA AMERICAN BRASS LIMITED, New Toronto, Ontario

# ANACONDA COPPER BRASS ANACONDA BRONZE

# For the Old Remodeling Job

Caen Stone Cement is a Life Saver

WHEN an old client wants you to revive one of his old "vintage of '98 office buildings" so that he may realize some income on the property instead of holding it at a loss, do not despair.

In addition to the obvious heating, plumbing and elevator changes, give him a Caen Stone Entrance Foyer made from Imported French Caen Stone Cement. Because,—if the entrance is archaic, few tenants will have any inclination to inspect the space above offered for rent.

We are the sole Importers of French Caen Stone Cement

PALMER LIME & CEMENT COMPANY

103 Park Avenue NEW YORK, N. Y.

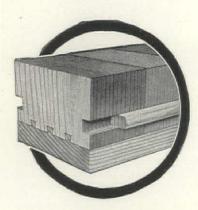
# A Statement

THE block floor in Carnegie Institute Gymnasium is not Bloxonend. This statement seems necessary because of erroneous statements coming from the Institute.

Bloxonend is not loose blocks but is a perfectly matched wood flooring strip, composite in its structure—the upper surface with the ends of the fibers meeting the wear.

Bloxonend is exceptionally durable, safe, resilient, non-sliver and non-slip. It stays smooth always.

### Prominent architects who specify Bloxonend for Gymnasiums include:



These 8 ft. sections make a tight, smooth floor—no loose blocks.

Archer & Allen	
W. E. Bort	
W. J. Brown	
Burrowes & Eurich Detroit, Mich.	
Donn Barber Associates	
Caldwell, Beckwith & WalkerBridgeport, Conn.	
G. Howard Chamberlin	
J. B. DeReimer	
A. L. Delehanty	
E. S. Gordon	
Howell & Thomas	
T. V. Huggett	
A. L. Harris	
Wm. B. Ittner St. Louis, Mo.	
Kidd & Kidd	
Lafferty, Buckler & Fenhagen	
H. M. Macklin	
W. H. Nicklas	
W. H. Nickias	
Nicklas & Roderick	
H. G. Perring (Engr.)Baltimore, Md. Edward W. PalmerBaltimore, Md.	
Carlton Strong	
Starrett & Van Vleck New York City	
Shattuck & Layer	
Chas. A. Smith	
O. M. Topp	
Van Leyen, Schilling & KeoughDetroit, Mich.	
Lucius K. White, Jr	
Wyatt & Notling Baltimore, Md.	

Architectural Specification gladly furnished on request

### CARTER BLOXONEND FLOORING COMPANY

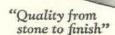
KANSAS CITY, MISSOURI

Branch Offices in Principal Cities-See Sweet's

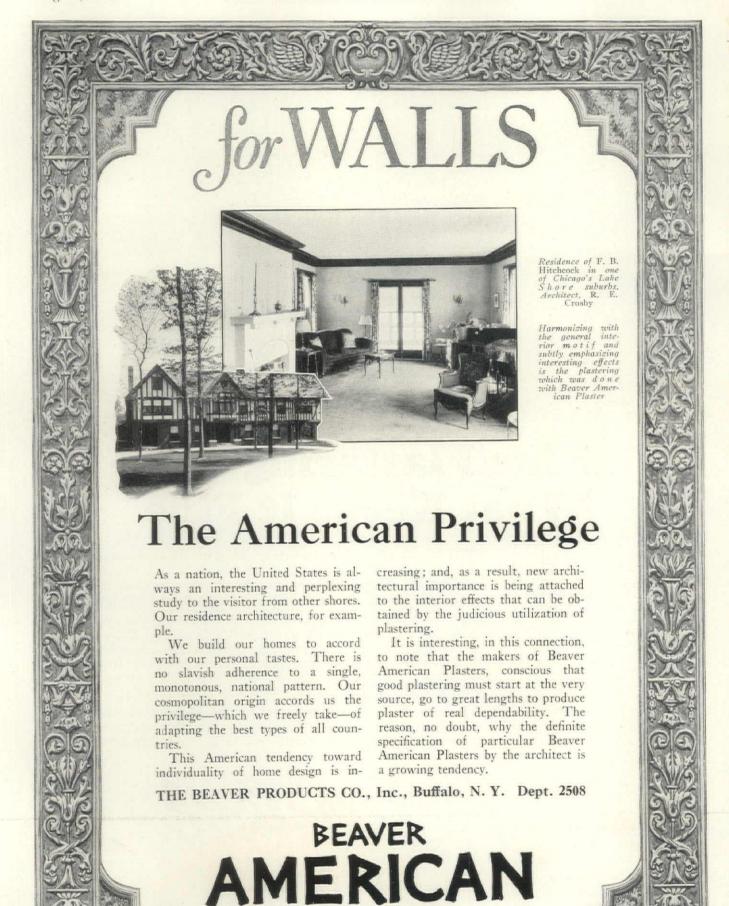
# BLOXONEND Lays FLOORING Smooth



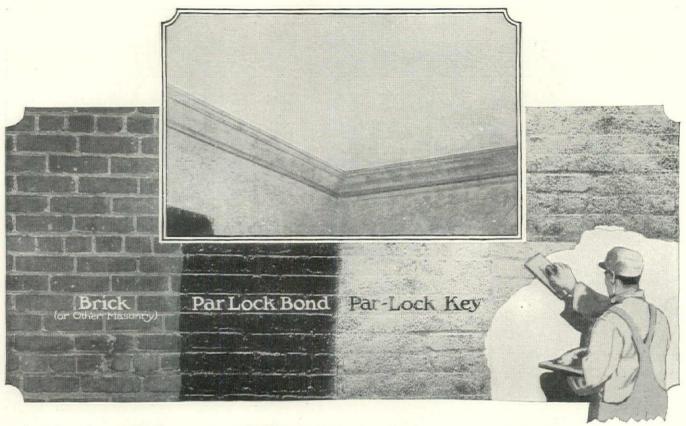




*ൟൟൟൟൟ<mark>൜൛ൟൟ</mark>* 



PLASTER



# Fine Plastering and What Keeps It Fine

### PAR-LOCK APPLIERS

located at any of the following addresses will gladly consult and submit estimates.

ALBANY, 425 Orange Street.

BALTIMORE, 613 West Cross Street. BOSTON.

BOSTON, 45 Commercial Wharf. BUFFALO,

BUFFALO, 958 Ellicott Square Building. CHICAGO, 122 S. Michigan Ave.

CLEVELAND, 404 Hunkin-Conkey Bldg.

COLUMBUS, 1005 E. Livingston. DETROIT, 2511 First National Bldg.

2511 First National Bldg MINNEAPOLIS, 200 Builders Exchange.

NEW YORK CITY, 50 Church Street PHILADELPHIA, 1613 Samson Street.

ST. LOUIS, 515 Chemical Bldg.

TORONTO, 2258a Bloor Street, West. TRENTON, 339 Broad St. Bank Bldg.

339 Broad St. Bank Bldg WASHINGTON, D. C. 410 Bond Bldg. YOUNGSTOWN, 509 Wick Building.

CORK INSTALLATIONS United Cork Company Lyndhurst, N. J.

THIS is an age of fine plastering, with a wealth of textures and color treatments far beyond the dreams of a few years ago. But it is not the quality of the plaster, but what's behind it, that determines lasting satisfaction with walls and ceilings.

Behind fine plaster, Par-Lock prevents stain, sweating and cleavage by (1) waterproofing the wall, (2) sealing against chemical reactions, (3) stopping the chill-bearing air currents that pass through pores of wall and plaster, (4) providing an elastic adjustment for differences of expansion between plaster and its support, (5) improving the bond.

Behind Par-Lock is a national organization of expert, responsible applying firms. Par-Lock is a service, not a mere material. For lasting satisfaction on high quality interiors, rely on the Par-Lock Applier and rely on

Par-Lock

Any Par-Lock Applier will gladly furnish data on Par-Lock and consult as to the character and cost of application required in a given case. See an applier or write to

The Vortex Manufacturing Co.
1984 West 77th Street Cleveland





THE NATIONAL COUNCIL FOR BETTER PLASTERING
1305 Madison Square Bldg., Chicago, Ill.





# BAKE U. S. PAT. OFF.

THE MATERIAL OF

A THOUSAND USES

"The registered Trade Mark and Symbol shown above may be used only on products made from materials manufactured by Bakelite Corporation. Under the capital "B" is the numerical sign for infinity, or unlimited quantity. It symbolizes the infinite number of present and future uses of Bakelite Corporation's products."



Oxford Hall, Detroit, Michigan, warmed by an Ideal Water Tube Boiler

# IDEAL Boilers

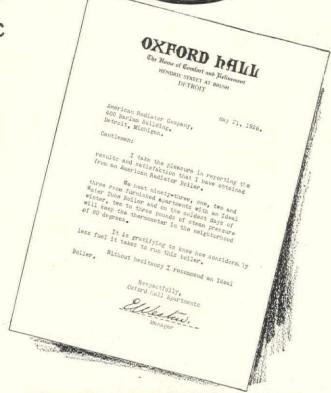
### make owners enthusiastic

ENTHUSIASTIC clients are the biggest asset any architect can have.

Everywhere architects have found that one sure way to create this enthusiasm is through the perfect performance of Ideal Boilers and American Radiators.

The letter at the right is not unusual. And naturally the architect gets the credit for having specified a perfect heating plant.

Every Branch of this company is equipped to give special service to architects. We shall be glad to have you call on us.



# AMERICAN RADIATOR COMPANY

Showrooms and sales offices: New York, Boston, Providence, New Haven, Newark, Philadelphia, Baltimore, Washington, Richmond, Buffalo, Pittsburgh, Cleveland, Detroit, Cincinnati, Atlanta, Chicago, Milwaukee, Indianapolis, St. Louis, St. Paul, Minneapolis, Omaha, Kansas City, Denver, San Francisco, Los Angeles, Seattle, Toronto, London, Paris, Milan, Brussels, Berlin

Makers of IDEAL BOILERS and AMERICAN RADIATORS and other products for heating, ventilating and refrigeration



Where One Inch Means So Much
—Don't Trust Hands

It is highly important that the top bars be set carefully in the reinforced concrete slab. If they are just an inch or so out of the way, the slab is weakened. The Kalman High Chair will help you here. It opens exactly to specified height. After each chair is placed according to specifications—an easy job—the reinforcing bars are laid across them. Then, everything is ready for the concrete. The top bars are located at the exact distance from the forms that specifications say they should be. The contractor has not been penalized in the least. For the Kalman High Chair actually speeds up steel setting. The cost of Kalman High Chairs is infinitesimal compared to the cost of the building-and they can play a most important part in the ultimate strength of the concrete. Of course, you are interested in better concrete construction. You will want to remember the Kalman High Chair on the next reinforced concrete job you design. Why not send for a folder on it for your files?

When you are working on a reinforced concrete job, get in touch with Kalman. Kalman engineers will be glad to help you. Just write.

KALMAN STEEL

KALMAN STEEL COMPANY, 1462 Wrigley Bldg., Chicago

Plants or Chicago New York Cleveland Buffalo Detroit Boston Baltimore Pittsburgh Syracuse Milwaukee Offices at Philadelphia St. Louis Columbus St. Paul Atlanta Dayton Minneapolis Youngstown



Residence of R. A. Perkins, Sioux Falls, South Dakota. One Oil-O-Matic is used to heat the 10 large rooms.

# An architect builds his own house and omits the coal bin completely

When R. A. Perkins, an architect of prominence in Sioux Falls, South Dakota, built his own house he planned on oil heat. How well he chose his oil burner is indicated by the remarks of his wife.

"Our house is new, with painted walls

in delicate shades of cream and gray. Yet this spring, these same walls were fresh and clean!

"Our Oil-O-Matic has been a happy investment in every way. We can go for a weekend or longer, and there will

be no change in the even radiation of the heat. Truly, it is modern magic of the most delightful kind."

Oil-O-Matic leads the world in oil burner sales. For seven years, it has shown how perfect oil heat can be, in any size house and with any kind of

good heating plant.

For full information, advise with the oilomatician in your community. Write for our latest book, "OIL HEATING—and what it means to the architect."



OLOMATIC HEATING

World's Largest Producer of Automatic Oil Burners Authorized dealers in every town and city of importance in the United States and Canada

	ΛF	- 92	6
- 4	TT	0	O

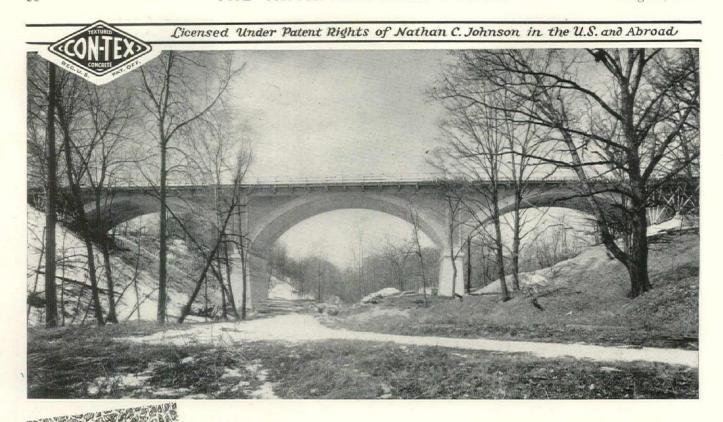
Williams Oil-O-Matic Heating Corp.,

Bloomington, Illinois.

Please send us a copy of "Oil Heating" and the name of the oilomatician in our community.

Name.

Business Address....



STANDARD Con-Tex wood forms.

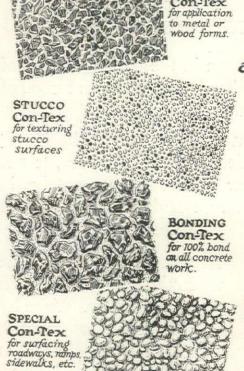
ABridge
at U.S. Naval Training Station, Great Lakes, Ill.
Bureau of Yards & Docks
U.S. Navy

This bridge is surface finished by Standard CON-TEX-the most economical and reliable means of giving texture, color, and character to concrete.

CON-TEX is a quick-drying, paint like material brushed on the forms before casting concrete. By CON-TEX action the surface layer of cement is prevented from setting to a predetermined depth. After the forms are removed, the loose surface particles are brushed off leaving the outer surface of the embedded aggregates exposed, giving character and beauty to the concrete.

Every engineer, architect, builder, superintendent and foreman should have a copy of "Surfacing Concrete with CON-TEX." Ask for it!

CONCRETE SURFACE CORPORATION 342 MADISON AVENUE, NEW YORK CITY

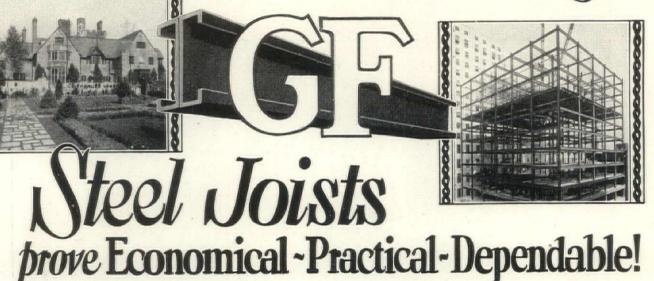


DRAWINGS

actual surfaces The Surfacing for Concrete

# In Homes, too!

In fact-in all light occupancy buildings



FROM the single home to the towering hotel, apartment or hospital structure GF Steel Joists are economical, practical and dependable. Steel Joist construction proceeds very rapidly, needing very little field labor. Several floors can be constructed at once and the finished floor construction is a strictly modern, rigid and firesafe one, dependable for all types of light occupancy buildings. GF Steel Joists will solve your problem of firesafe design in such structures. Full details will be gladly sent on request. Return the coupon.

## THE GENERAL FIREPROOFING BUILDING PRODUCTS YOUNGSTOWN, OHIO

Branches: New York Chicago Philadelphia Boston Cleveland Los Angeles St. Louis Omaha Indianapolis Syracuse M Kansas City S Minneapolis Portland, Oregon

Milwaukee San Francisco Atlanta

Pittsburgh Indianapolis Portland, Oregon
Export Dept.: 90 West St., New York · Cable Address: "Firegen New York"

### Other GF Products

GF Trussit

GF Expanded Metal

GF Diamond Rib Lath

GF Herringbone Rigid Metal Lath

GF Key Lath

GF Corner Bead

GF Steel Channels

GF Self-Sentering

GF Steel Tile

GF Peds

GF Duplex Steel Bridging

GF Steel Sash

GF Steel Basement and Casement Windows

GF Lintels

GF Industrial Steel Doors

GF Wire Mesh

GF Concrete Reinforcement

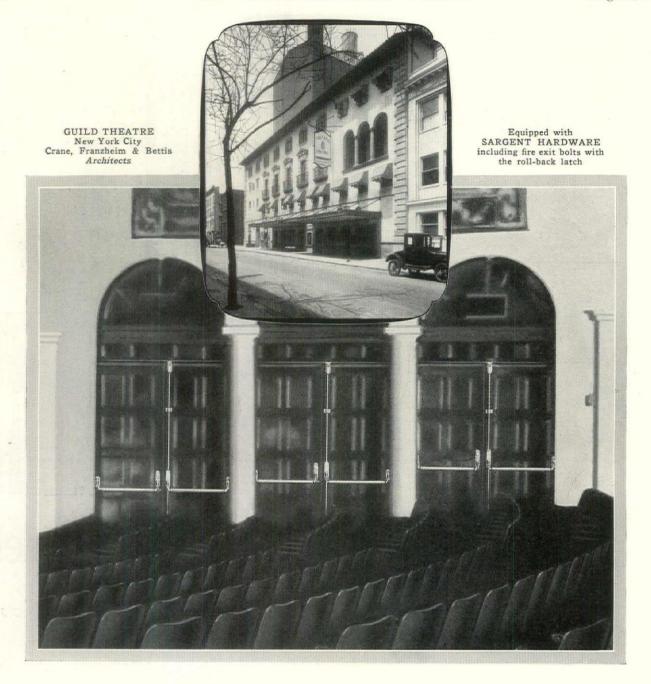
GF Waterproofings

GF Road Forms

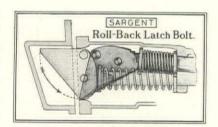
THE GENERAL FIREPROOFING BUILDING
PRODUCTS
Youngstown, Ohio
Send me catalog and full information on GF
Steel Joists.

Name
Address





IN ALL probability New York has the strictest fire laws in the country —particularly as applied to schools, theatres and similar buildings. Sargent fire exit bolts have always met every specification of the city's fire underwriters. Now they incorporate a new and exclusive safety feature —the Sargent roll-back latch, on which an application for patent has been filed. This insures operation of the doors under the most trying



Sargent Roll-Back Latch Bolt
An improved action by which Sargent fire
exit bolts operate instantly when pressure
is applied to cross-bar, the latch-bolt
being rolled back into case of lock instead
of being drawn back.

circumstances. The pressure of a child against the cross-bar will open it. The weight of a crowd against the door cannot jam the mechanism, as is possible with the sliding type of latch bolt. Details and specifications on request.

SARGENT & COMPANY

Hardware Manufacturers

NEW HAVEN, CONN.

New York: 94 Centre Street Chicago: 221 W. Randolph Street

SARGENT

Locks & Hardware

# Authentic Forged Iron Hardware Without Application Difficulties

McKinney clears up the three difficulties which have attended the use of forged iron hardware in the past: application, finish and delivery.

As you know, McKinney makes the famous McKinney Butt-Hinges. Sixty years' experience with architects' and builders' problems in fitting hardware was brought into play when McKinney Forged Iron was developed.

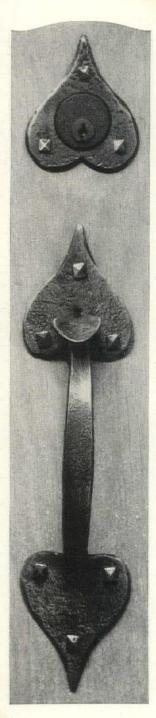
The completed pieces, while being of authentic design based on the finest traditions of the work of metal craftsmen of past centuries, are primarily gauged to fit modern building requirements.

An entrance handle set in the justly famed Heart design (illustrated here) has a rosette accurately made for use with modern locks.

Hinge straps, both straight and offset, are reversible. There is not a handed item in the line.

For use with shutter straps, there are butt-hinges specially designed to clear the reveal of any type of construction.

Directly from a McKinney catalog you may write complete specifications for a resi-



dence, as easily as you now specify on standard lines. And you may include all hardware, from entrance door to kitchen cabinet complete.

McKinney made no effort to supersede and "improve" the designs of the old master artisans. The designs are authentic: Tulip, Heart, Curley Lock and Etruscan being available, the Etruscan being illustrative of the finest work of the Southern European countries of several centuries ago.

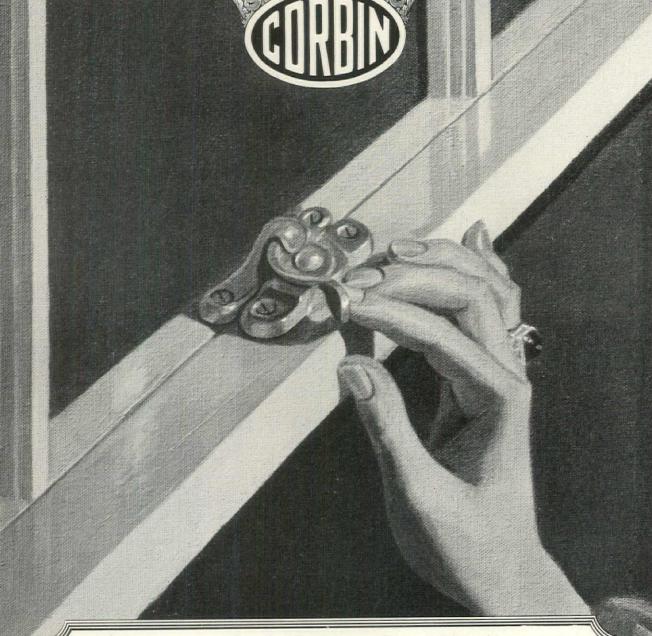
All pieces are made in three finishes: Dead Black Iron, Relieved Iron and Rusty Iron. They are immediately available through your local builders' hardware merchant, so there need be no waiting on the job. The fact that every piece is especially protected to resist rust and given a final finish that will withstand wear and exposure assures lasting satisfaction to your clients.

The coupon is for your convenience in obtaining the special catalog for your files.

McKinney Mfg. Co. Pittsburgh, Pa.

Forge D	vision by Mfg. Co., Pittsburgh, Pa.
Kindly	send me your Free Brochure or y Forged Iron Hardware.
Name	
Address	
Name of	your Hardware Merchant





### To the outsider looking in Good Hardware— Corbin - says "Keep Out."

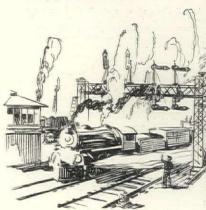
Sturdy Sash Fasteners of solid brass or bronze that will not give an inch. Cylinder Locks that admit no one save their owners. Staunch Bolts to bar intruders. Strong Night Latches to guard the unprotected door.

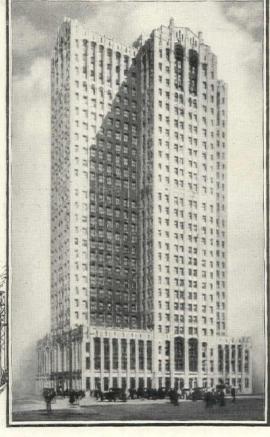
Each made for the security of the homes you plan - the buildings you create. All made as only Good Hardware - Corbin, is made - to look well, to work well, to last long. Whatever the hardware need may be there is a Corbin answer to it.

P. & F. CORBIN SINCE NEW BRITAIN CONNECTICUT
The American Hardware Corporation, Successor
NEW YORK CHICAGO PHILADELPHIA

In Railroading, from the heaviest crane to the most delicate relay, Ball Bearings are essential

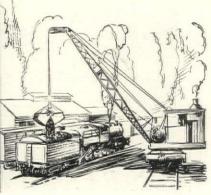
In fifty years, ball bearings have become an essential in almost every type of machine. In railroading, modern safety signal methods would not be possible without this efficient method of overcoming friction.





Buhl Building Detroit, Mich. Smith, Hinchman & Grylls Architects

This beautiful building is equipped with Stanley Ball Bearing Butts throughout.



# The constant grind of unlubricated wear calls for Ball Bearing Butts

FOR doors that bear the brunt of heavy traffic, we recommend ball bearing butts. Unlubricated friction of metal on metal, which occurs in most hinges, results in quick wear.

Over a period of years the expense of repairs and replacements of ordinary hinges which you save will more than pay for the additional cost of ball bearing butts. The ball bearing feature is an investment—not an expense. The Stanley Works pioneered in the making of high grade butts.

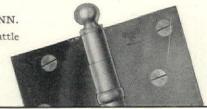
Stanley standards of design and quality are well known to the architectural profession.

Stanley Ball Bearing Butts are made of cold rolled bronze and steel. They have non-detachable (non-losable) washers, and are perfected in every feature.

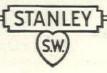
You will find that Stanley Ball Bearing Butts render maximum efficiency for life. Look for the Stanley trade-mark on every butt.

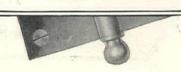
The Architect's Manual of Stanley Hardware contains information which will aid you in selecting and specifying the correct hardware. We will gladly send you a copy. A description of the Stanley line of butts and hinges can be found in Sweet's Catalogue, pages 1556 to 1568.

THE STANLEY WORKS, NEW BRITAIN, CONN. New York Chicago San Francisco Los Angeles Seattle

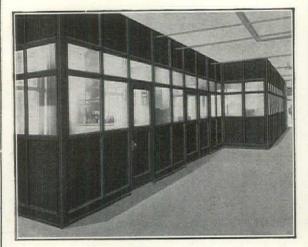


## STANLEY BALL BEARING BUTTS









Arlington Chemical Co., Yonkers, N. Y.

# Solid for a Lifetime — Movable Overnight

OFFICE requirements, like the style of your collar or the mood of your stenographer, have a habit of changing overnight. An ideal division of space today may be an impractical layout tomorrow.

That's one reason why many factory executives insist on Sanymetal Office Partitions. Their unit-section design, adaptable to any floor-space or height, permits of easy rearrangement. With all this flexibility, Sanymetal insures a permanent, unshakable strength that withstands indefinitely vibration, bumps, and banging doors. It's as dignified and goodlooking as any high-grade wood partition ever was—and cleaner, safer from fire, more durable, cheaper in the end.

If you are considering the installation of office, factory or toilet partitions, write today for new Sanymetal Catalog No. 15, illustrated with typical layouts.

THE SANYMETAL PRODUCTS CO. 1702 Urbana Rd. Cleveland, O.





### A COMPLETE LINE



Hauserman PARTITIONS

Installation of Type M Cornice Height Partitions in one of America's largest banking institutions.

THE Hauserman line is complete—a type and grade for every purpose, from the fine executive office to the factory.

No matter what your clients' partitioning needs may be, this totally different steel partition is built to serve them better! Ask for architect's portfolio.

Salient Features

1. Complete Line

Line
2. Easily
Wired

Wired
3. Inviting
Appearance

4. Greatest Flexibility

5. Sensational Values 6. Erection Service

The E. F. HAUSERMAN CO., 6803 Grant Ave., Cleveland, O. New York Boston Pittsburgh Detroit Chicago

## OFFICE PARTITIONS

MADE BY THE MILE Reg. U. S. Pat. Off. SOLD BY THE FOOT

### The Value of Our Partitions

A N architect does not specify Mount & Robertson Office Partitions without a knowledge of their value.

Their usefulness is manifested first when our engineers carefully plan the space and the partitions are quickly put in. The partitions can also be rearranged or added to.

Their splendid appearance lends dignity and beauty to any office of which they are a part.

Railings, Bank Fixtures, Directors' Rooms, Stock Boards, etc. Also special cabinet work from your own details.



## MOUNT & ROBERTSON, Inc.

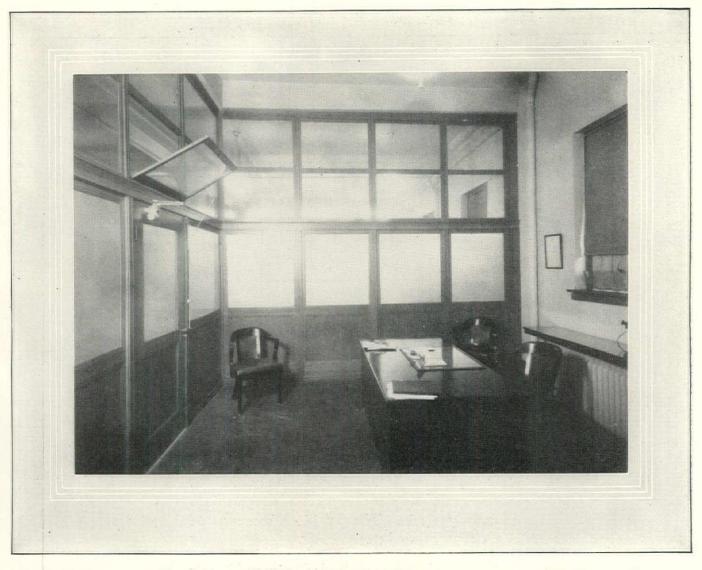
OFFICE ENGINEERS

62 Broad St.

Phone, Hanover 5727

New York

Established 1893



# If Your Office Had No Doors or Windows

IF NO doors or windows were needed within the office, it will probably be cheaper to subdivide it with plaster walls than to use Circle A Partitions.

It is self-evident that any layout calls for doors into the various divisions, and in almost all offices it is necessary to make use of borrowed light.

When the cost of placing the doors or windows is considered, the cost advantage of plaster partitions quickly disappears.

You will then find that Circle A Partitions, sectional and movable, are not only better, but also cheaper.

Circle A Partitions are sectional and movable, and can be rapidly erected to make any desired arrangement. You can use them over and over again, and change the office layout to meet the constantly changing needs of business.

They also bring to the office the handsome appearance, fine woodwork that can only be achieved by master craftsmen with modern tools, working in fine woods.

We will gladly send our new catalogue to anyone interested.

CIRCLE A PRODUCTS CORPORATION

650 South 25th Street, Newcastle, Indiana

New York Office: Farmers Loan and Trust Bldg., 475 Fifth Ave., New York



Houston Post-Dispatch Building, Houston

CIRCLE A PARTITIONS

SECTIONAL AND MOVABLE

# BOOK DEPARTMENT

## The Splendor of the Romanesque

A STUDY OF THE TYPE IN ITALY

ANY a student of architecture, dazzled by the rich and severe beauty of Greek and Roman forms, absorbed in the mystery of the Gothic age, or carried away by the brilliance of the Renaissance or the types which have sprung from it, fails to give more than casual interest to what to other students is

more interesting than any,—the Romanesque, as it was developed in western Europe during what may be roughly described as the two centuries from 800 to 1000 A. D.

The world during the ninth century and the tenth was obsessed with the belief that the year 1000 would see the end of all things as foretold by the Apocalypse. When the mystical year had passed and the world still pursued her wonted way, there came a powerful renewal of interest in things earthly, art and architecture being by no means overlooked. There had been another reason for this renewed The reign of Charlemagne, giving promise as it did of a Europe once more united and powerful, had renewed faith in Rome as the predestined center of the world and had tended to again spread over Europe the belief that from Rome should emanate the animating force nec-

essary for invigorating and once more renewing the earth. The type of architecture which arose during this era and which is called "Romanesque" forms the subject matter of the volume under review. Among the characteristics of the style a few may be briefly mentioned: (1) wide use of the round or semi-circular arch; (2) walls of brick or of stone given a more or less smooth surface, or else built of alternating courses of brick and stone; (3) use, particularly at doors, of columns freestanding or engaged, clustered shafts or half-rounded piers from which round arches were made to spring; (4) placing of small arched windows in groups of two, three or more resting upon slender colonnettes, the entire group often set within a single larger blind arch; (5) much use of corbels, corbel tables, or pilaster strips upon which (particularly upon outer walls) members forming blind arches were placed; (6) use of the rose window, a detail which during the Gothic era was to receive treatment incomparably magnificent; (7) a wide use of ornament derived from Byzantine sources, particularly in the form of carving on capitals, *voussoirs* and spandrels. Many parts of Europe felt the stirrings of this revitalizing influence upon architecture, and particularly of

an incomparable beauty was and still is the Romanesque of Italy which is discussed here.

In this volume there is given a presentation of what yet remain of the Romanesque structures built in Italy, a country which made wide use of Romanesque forms long after the rest of Europe had been committed to the use of Gothic. The time when they were built antedated the era of building great city palaces and country houses, and building was largely or rather chiefly in the form of churches, the plan of which was ordinarily that of the primitive basilica (often with an atrium), a semi-circular apse forming the east end of the nave and often of each of the aisles. Circular churches were not unknown, and extensive use was made of the campanile, sometimes joined to the church and sometimes standing alone. Added to the richly decorative use of



Side Portal of a Church in Cagliari Romanesque of the Thirteenth Century

Romanesque forms for the buildings themselves a use supremely rich was made in fashioning details of interior furnishings, parapets to screen choirs or chapels; *ambos* or pulpits; fonts and episcopal thrones; paschal candelabra; altars and their *baldachinos* and other accessories.

A work of this scope is necessarily largely of illustrations. This volume, apart from some 27 pages of excellent text, is entirely of half-tone illustrations selected with a view to widening the practical application of the Romanesque style. The mere selection of subjects for illustration from the vast number available proves the author possessed of taste of a high order. The volume constitutes a valuable addition to the data regarding an architectural type of importance to the modern world.

ROMANESQUE ARCHITECTURE IN ITALY. By Corrado Ricci. 260 pp., 9 x 11½ ins. 350 illustrations. Price \$10. Brentano's, Inc., 2 West 47th Street, New York.

### HOUSE & GARDEN'S Second Book of Interiors

EVERY little while a new volume is added to the House & Garden series, which deals with houses, their exteriors and interiors, and their gardens. In this, the latest and by far the most helpful and stimulating of these volumes, there has been collected the very best of the invariably excellent matter which has appeared in House & Garden during the past year or two. It is a volume valuable alike to the architect, the interior decorator and the home owner, as well as to the large number of people casually interested in interior decoration.



SEVEN hundred illustrations deal with every department of the house,—entrance porches, vestibules and halls; reception and living rooms; libraries, dining rooms and kitchens; stairways; bedrooms and bathrooms; verandas and terraces, all these illustrations presenting the most perfectly planned and beautifully arranged examples, the greater part of which are of distinctly moderate cost. Other departments deal with color schemes of which a great many are suggested; with accessories, such as bookcases and built-in bookshelves; lamps and lamp shades; mirrors and other details of furnishing; and one section is given up to illustrations and text which make entirely plain the types of furniture of the different historic periods.

It would be impossible to over-emphasize the value of this work to anyone interested in its subject.

223 pages. 934 x 1234 inches. Price \$5.

ROGERS & MANSON COMPANY
383 MADISON AVENUE, NEW YORK

THE DEVELOPMENT OF AMERICAN ARCHITECTURE. By Joseph Jackson. 230 pp. 5 x 7½ inches. Price \$2.50 Net. David McKay Co., Washington Square, Philadelphia.

W HATEVER may tend to increase popular appreciation of architecture, and especially whatever may tend to deepen appreciation of the great heritage of early American architecture and the work of individual architects who worked prior to the middle of the nineteenth century, is to be sincerely welcomed as a contribution of value. "The Development of American Architecture," by Joseph Jackson, a volume just issued from the press of the David McKay Company, of Philadelphia, is a useful addition to the literature already published dealing with the field just indicated. In the 214 pages of text with 50 half-tone illustrations, many of which are reproduced from old prints and drawings, the author pleasantly discusses the story of American architecture between the years 1783 and 1830.

The chief value of the book lies in the stress it places on the work of Benjamin Henry Latrobe, Robert Mills, William Strickland, Robert Carey Long, John McComb, Jr., Major L'Enfant and others whose names are too often forgotten when American architecture before 1830 is under consideration. Latrobe, McComb and L'Enfant, it is true, are something more than mere vague memories to a great many people; but Mills, Strickland and Long and the work they performed are in danger of sinking into an undeserved oblivion even among those who should have a reasonable acquaintance with the architectural annals of the country. By their personal labors all these men profoundly influenced the form and substance of American building, and not only in their own day and generation, for they also left an indelible impress upon the development of national architecture that can be clearly traced down to the present day. Many of the buildings they designed have unfortunately been demolished, but enough remain to afford important links with the past, and the authorship of these monuments should not be a matter of indifference. Mr. Jackson has told the story of these architects and of the buildings they erected in a way likely to remain in the memory.

Another admirable feature of Mr. Jackson's little volume is to be found in the clear manner in which he has pointed out the different phases of building development that were going on simultaneously in the several parts of the country. One of the most illuminating chapters dealing with this sectional growth and the local peculiarities manifested is devoted to the building of Washington. In discussing the popular attitude of the time towards the proposed creation of the federal capital, the author observes that "there were backward-looking persons in those days as well as in these, who wanted to harass progress. They were alarmed at the proposed size of the new federal district, which was to be ten miles square." But Washington pointed out that "if the metropolis of Pennsylvania (Philadelphia) occupied a tract two by three miles, the extent of the federal city was none too large.'

Major L'Enfant's connection with the planning of Washington is generally known, and a great many are acquainted with the fact that he was never paid for his fabors, as he indignantly refused the inadequate sums voted by congress. In alluding to the difficulties created by the temperamental Major's own attitude, Mr. Jack-

son says: "It is unfortunate that L'Enfant was so impatient and domineering. He had trouble from the start, because he began to act upon no authority but his own, and actually demolished the house of a respected resident of Duddington, both against the owner's wishes and without authority from the commissioners under whom, by law, he was serving. His best friend, President Washington, was compelled to tell him in exact terms that he had disobeyed the law and would have to take the consequences. He told him that he must work with the commissioners. Even to this advice of a friend and the chief personage of the country, L'Enfant was deaf, and continued his work defiantly. Washington recognized his worth to the country, but he wrote to the commissioners after the Duddington incident: "You are as sensible as I am of his value to us. But this has its limits; and there is a point beyond which he might be over-valued." Finally the President was forced by his continued defiant and unlawful acts to dismiss the French engineer. The latter continued to live in this country, but withdrew himself and nursed his grievance. Throughout he had acted as a spoiled child, and would brook no interference. The book is full of such intimate and elucidating sidelights. There are also valuable comments on the dawning recognition of architecture as a necessity.

VERSAILLES; ITS LIFE AND HISTORY. By Cecilia Hill. 243 pp. 4¾ x 7½ inches. Price \$2.50 Net. Little, Brown & Co., Boston.

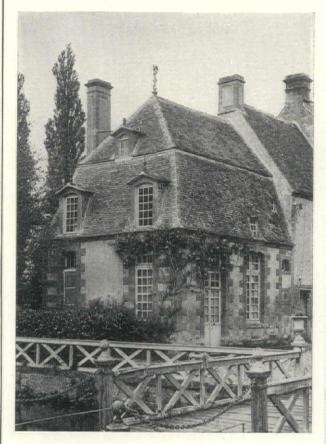
F books about the Palace of Versailles there may well be no end, perhaps because the kingly dwelling begun by Louis XIII and brought to completion by the Grand Monarque may be justly regarded as France in epitome during the seventeenth and eighteenth centuries, and the life of Versailles as the quintessence of French life and history during this period. The whole architectural, artistic and social life of France found its focus, indeed, at Versailles from the time that Louis XIV started on his magnificent building career until the dark days of the French Revolution ended an era of dazzling splendor altogether unparalleled.

At all events, however one may regard Versailles historically and socially, it cannot be denied that the fabric alone is an inexhaustible storehouse of interest. The authoress of this book of 235 pages, embellished with numerous half-tone illustrations, has performed an invaluable service in giving a most carefully detailed and admirably arranged history of the building, noting all the successive changes that have taken place. Not only has she done this in the most lucid and logical manner imaginable, but she has also contrived to remove the subject from the realm of dry-as-dust data and statistics and infuse into it an enormous amount of human, personal and historic interest, so that the different chapters are not merely records of materials and dimensions, which one reads and straightway forgets, for the facts are so interwoven with personal incidents and anecdotes that they fix themselves quite indelibly in the memory. The Palace of Versailles is peculiarly the outward manifestation of Louis-le-Grand's personality, the abiding memorial of his hopes and aspirations, his triumphs and failures. Since this is so, no one can hope thoroughly to understand the building without knowing something of the man who called it into being and who imposed his personality and ideals upon the architects and other artists who worked for him, not merely in a perfunctory,

# FRENCH PROVINCIAL ARCHITECTURE

A Constructive and Practical Work on Minor French Buildings

By PHILIP LIPPINCOTT GOODWIN and HENRY OOTHOUT MILLIKEN



SOME of the most graceful and distinguished architecture in the world exists in French provincial towns, small villages and in tiny hamlets which cluster about the great chateaux—small manors, halftimber cottages, shops and buildings of other kinds. Much of this wealth of design is applicable to American use—the exteriors largely for suburban or country houses, and the interiors for residences or apartments. The authors, with unerring architectural taste and judgment, have selected just those details which possess proportions and suitability for present-day use. The volume contains illustrations, plans and measured drawings worth considerably more than the cost of the work.

Text, 40 Plates of Measured Drawings 94 of Illustrations

> Size of Pages, 11x15 ins. Price \$20

ROGERS & MANSON COMPANY
383 MADISON AVENUE NEW YORK

professional manner but with genuine enthusiasm, and aided him to amply realize his architectural ambitions.

In view of this unique condition, the authoress has included a singularly able, fair and sympathetic analysis of Louis' personality and character. In part she says of him: "Louis XIV had two sides, the man and the king—and the king came first. As such he saw himself a divinely appointed intermediary between God and people. . . . As such he was invariably benevolent, measured, great; with an enormous patriotism and sensitiveness for France so that every Frenchman felt the honor of the country to be safe in his hands. He gave a prestige to monarchy unknown before. Never, through all the intoxication of youth and adulation and passion, did Louis XIV forget what was due to the dignity of the crown. Hence the decorum, even in his faults—though he never loved a woman as much as he loved France.

"He could be hard and incredibly selfish in private life, and considered himself placed above the morals of ordinary persons; but then all his subjects shared that view. It was he himself who set the limit to his will—a limit that touched every point of life—his duty as a king. He had an enormous sense of duty. He worked hard for France. Never for any hunting did he miss a council meeting, or neglect a state appointment, or say foolish, indiscreet things or betray a state secret. As a child he was given to violent anger, but only three instances were noted in his later life that he gave way to it. This self-control, this sense of measure and dignity spread even to small things, to dressing, eating, ceremonial, precedence, and it

must be owned that Louis XIV had little sense of humor. . . . Though as a young man he was clumsy, he so schooled his body for the sake of France that majesty and gracefulness seemed natural to him. . . . He kept his body agile into middle age by constant exercise. He had the large Bourbon nose; contemporaries agree he was not handsome as a boy, and he was early pitted with small-pox; still, his profile was one to delight sculptors, and Lebrun turns it to decorative use on his ceiling. In fact he grew 'decorative' in a massive way—what we call grand siecle. . . . He could look like a country farmer or like a Roman emperor. Perhaps because of his neglected, lonely childhood he seldom smiled, but when he did, the smile was winning, and his courtesy toward women was invariable; he raised his hat even to a housemaid."

It is refreshing to have an estimate of Louis XIV that is neither a fulsome panegyric nor an unlimited denunciation, an estimate that portrays him as he really was, a very human mixture of good and ill. But it is not Louis alone whose personality is inseparably associated with the halls and salons of Versailles. The writer has agreeably traced the many other personal associations with the various parts of the Palace so that we may see Madame de Maintenon, the young Duchesse de Bourgoyne, the sharp-tongued Madame, Louis' sister-in-law, or the queenly Marie Antoinette, each in her accustomed environment. All of this combined architectural, historical and personal subject matter is so pleasantly blended that the book cannot fail to be both useful for reference and exceedingly readable, however one may intend to use it.

# The Practical Book of Tapestry

By George Leland Hunter

HE intimate connection between tapestry and architecture as well as the frequent use of architectural motifs in tapestry design gives to tapestry and its history an interest to architects which is strong. Primarily associated with the Gothic age, which saw what were perhaps the most brilliant of its triumphs, tapestry has been identified with the development of all of western Europe and with the different periods the Renaissance, early and late; the Baroque age; the eras of the different Louis; and in later days with the

various places where looms have been set up and where present-day workers are engaged in creating by use of old-time methods those marvelous weaves which add to any surroundings where they are placed a richness of decoration which confers dignity and splendor to the place where they are used. No study is more absorbing than that of tapestry.

student for the first time examples of tapestry weaving of the first importance. The volume is particularly valuable by reason of its accurate documentation and full bibliography and because of its giving the names of places where there

tographs made especially for this work, and many show the

and because of its giving the names of places where there are to be seen the most important tapestries now in existence.

302 pages; 6½ x 8¾ inches. Price \$10.

Richly illustrated in half-tone and full color.

383 Madison Avenue, New York

IN this volume is given a complete review of the

subject of tapestry. The au-

thor has made a deep study

of tapestry's history and is

familiar with every important

example in the world. The

volume deals also with the

technique of tapestry weav-

ing, the changes and develop-

ment of its design in different

countries at different times,

and it goes at length into

descriptions of modern looms

where this ancient art has

been successfully revived. The

illustrations, many in full

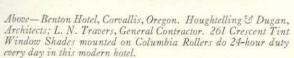
color, add to the reader's

interest. All are from pho-

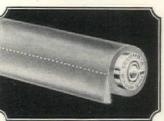
ROGERS & MANSON COMPANY







Left—Bedell Building, Portland, Oregon. George Schonewald, Architect; Hanson-Hammond Co., General Contractors. 510 Columbia Damasko Window Shades on Columbia Rollers are used throughout this splendid structure.



TROUBLE-PROOF is the word that best describes the Columbia Roller. Its spring is silent, rugged and smooth-running. Its brass ferrules are nickel-plated—hence, rust-proof. And in durability, the roller matches the close-textured shade cloth. Both are made to withstand hard service and careless usage. Yet they sell for substantially the same price as shades and rollers which lack their desirable features.

# Windows, windows everywhere and still the light is wrong

The modern building is "all windows"—a structural steel skeleton with glass filling in the open spaces!

Yet, in spite all this effort to secure plenty of window space, nine out of ten buildings are incorrectly lighted during the day. Paradoxical—but true!

Often the trouble is too much light—floods of harsh, unpleasant, eyestraining glare. Frequently, however, the fault is insufficient light—natural daylight barred out by dark, opaque shades.

The fact is that windows are not merely windows—they are lamps which light rooms by day. Look on windows as lamps and a hard problem becomes easy. Just as the light from blazing electric bulbs is always modified by shades or indirect lighting

fixtures, so the light from windows should be transfused and mellowed by modern translucent window shades in *tone colors*.

In the two buildings pictured on this page, the problem of daytime lighting has been scientifically and successfully solved by *Columbia* Window Shades. No glare in those buildings. No buying of expensive artificial light to substitute for free, barred-out sunlight. *Columbia* tone colors let in just the *right* amount of *right* light.

For 100% comfortable and satisfactory daytime illumination, specify Columbia Shades and Columbia Rollers.

The Columbia Mills, Inc. 225 FIFTH AVENUE, NEW YORK

Boston Chicago Cincinnati Cleveland Detroit Pittsburgh Kansas City Fresno New Orleans Philadelphia Portland (Ore.) St. Louis San Francisco Minneapolis Los Angeles PORTLAND, Oregon boasts many of the finest buildings on the Pacific Coast—and most of these are completely equipped with Columbia Window Shades and Rollers including the following list.

Bedell Building Meier & Frank Building Medical Arts Building St. Vincent's Hospital Doerenbecher Hospital Oregon Blind School & Employment Inst. Ambassador Apartments Herman Nelson Apartments Shriners' Hospital for Crippled Children U. S. Grant High School (Addition) Abernethy Grammar School Hosford Grammar School Ockley Green Grammar School Telegram Building Fitzpatrick Building Biltmore Apartments Stonewall Apartments New Y. M. C. A. W. O. W. Temple Holladay Grammar School Multnomah Grammar School Joseph Kellog School Kenton Grammar School Mishkind Apartments Portone Apartments Weidler Court Apartments

Columbia WINDOW SHADES and ROLLERS



Frank G. Shattuck Company

Russell G. Cory, Architect

## WAREHOUSE AND FACTORY BUILDING ERECTED BY TURNER CONSTRUCTION COMPANY

Although an increasing proportion of our business is standard brick and steel construction, such as hotels, office buildings, hospitals, etc., we are also doing concrete industrial work at all times.

### TURNER CONSTRUCTION COMPANY

ATLANTA BOSTON PHILADELPHIA NEW YORK BUFFALO CHICAGO

# The ARCHITECTURAL **FORUM**

VOLUME XLV

NUMBER 2

### CONTENTS for AUGUST 1926

PLATE ILLUSTRATIONS Architect	Plate	LETTERPRESS Author	Page
George Harrison Phelps, Inc., Building, Detroit		New Apartments from Old Houses  Roger Wearne Ramsdell and Harold	
Smith, Hinchman & Grylls	17-21	Donaldson Eberlein	85
King Hooper Shop, Boston		The Building Situation	91
House of Mrs. A. C. Baldwin, Bedford	22-24	The Designing of Open Timber RoofsE. T. P. Walker	93
Hills, N. Y.		A Theory Relating to Spanish and Italian Houses in Florida	
Butler & Corse	25-32		97
LETTERPRESS Author	Page	A House at New Rochelle, N. Y.	
Cover Design: The Prior's Door, Ely			105
Cathedral From a Drawing by Louis C. Rosenberg		Arthur Jones House, Glencoe, Ill	107
The Editor's Forum	67	House of Frank Hartley Anderson, Esq., Architect, Birmingham, Ala	109
Entrance to the Pantheon, ParisFrom a Drawing by Samuel Chamberlain Fro.	ntispiece	Parkinson House, Santa Monica, Calif.  John P. & Donald B. Parkinson, Architects	111
Two Recent London Buildings		Stanley McArthur House, Birmingham, Ala.	
H. J. Birnstingl	65		113
St. James' Church, Winsted, Conn. Coffin & Coffin, Architects		House of M. D. Arnold, Esq., Knoxville, Tenn.	
Kenneth Ford Coffin	73	Barber & McMurray, Architects	115
George Harrison Phelps, Inc., Building, Detroit		House of Henry E. Baskervill, Architect, Richmond, Va.	117
Smith, Hinchman & Grylls, Architects	79	House of Key Foster, Esq., Birmingham, Ala.	
The Historic Cathedral and Library, Vincennes, Ind.			119
Thomas E. O'Donnell	81	The Dining Room at Compiegne	121

PARKER MORSE HOOPER, A. I. A., Editor

#### Published Monthly by

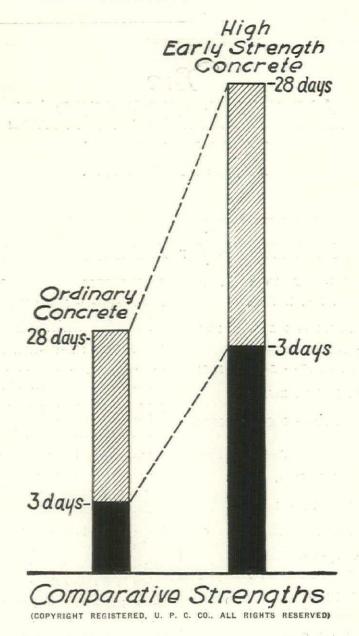
#### ROGERS & MANSON COMPANY

383 Madison Avenue, New York

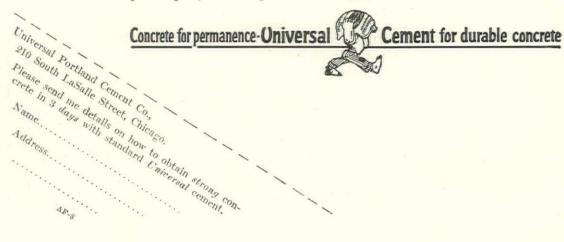
Howard Myers, Pres.; C. Stanley Taylor, James A. Rice, Vice-Pres.; Robert Sweet, Sec. and Treas.
Paul W. Hayes, Asst. Treas.
Yearly Subscription Payable in Advance, U.S.A., Insular Possessions and Cuba, \$6.00. Canada, \$6.75. Foreign Countries in the Postal Union, \$7.50

Single Copies, 60 cents. All Copies Mailed Flat
Trade Supplied by American News Company and its Branches. Entered as Second Class Matter at the Post Office at
New York, N. Y.

Copyright, 1926, by Rogers & Manson Company



Quick-Hardening Concrete with a 3-day strength of 2000 pounds or more, with a 28-day strength double the 28-day strength of ordinary concrete and with any consistency or degree of workability desired is obtained with standard Universal cement, the same quality Universal as regularly used, by following the methods described in a circular sent promptly on request. Simply use the coupon below.



# THE EDITOR'S FORUM

#### METROPOLITAN LIFE'S HOMES

O present in convenient and concise form the history of its notable effort toward providing a practical solution of New York's "housing problem," the Metropolitan Life Insurance Company issues a brochure entitled "Comfortable Homes in New York at \$9 a Room a Month." The booklet describes and illustrates the blocks of apartments in the Borough of Queens of which Andrew J. Thomas and D. Everett Waid were the associated architects, the Metropolitan's aim being to provide at costs within their means comfortable houses for what are ordinarily known in America as the "working classes."

Two paragraphs from the brochure are of particular interest: "As to the financial results. final reports as to cost are not yet ready, but enough is known to state that the total investment by the Metropolitan Life Insurance Company will approximate \$7,500,000; that the rentals are over \$1,000,000. Figuring expense of operation at what are believed to be liberal allowances, there seems to be no doubt that a net return of at least 8 per cent will be realized, and it is hoped something more. The Company will credit 6 per cent of this return to interest, and anything above that to the amortization of the cost of the property, expecting thereby to gradually reduce the book value to such a point that when tax exemption expires January 1, 1932, the book value at that time will be such that 6 per cent or more can still be realized upon the investment.

"The lesson to be derived from this experiment seems obvious. It is doubtful if 8 per cent net on cost could be realized, without tax exemption, at a rental of \$9 per room per month; but there is no doubt that an additional rent of \$1.50 per month per room would abundantly provide for full taxes. If, therefore, limited dividend corporations, other life insurance companies and employers of labor desiring to produce apartment homes at the lowest rent possible, with a sure net return of say 8 per cent, would use the same methods the Metropolitan has in this operation, there seems to be no doubt that a maximum rental of \$10 to \$11 per room per month will produce 8 per cent net and pay full taxes. but only if the homes are built on low-priced land, easily and cheaply prepared for building, and with public utilities already provided and fully paid for."

#### A CORRECTION

THE June Forum presented illustrations of the chapels at West Point and at the University of the South, Sewanee, Tennessee. These chapels were, through an oversight, credited to Cram & Ferguson instead of to Cram, Goodhue & Ferguson.

#### GOVERNMENT BUILDING PLANS

A DISPATCH widely published in the New York press during June gives some account of the plans the government contemplates taking to stabilize the building industry during the next few years. The government building program contemplated in the authorization of congress of expenditures aggregating \$165,000,000 over the next six years will be manipulated by Secretary of the Treasury Mellon to offset any general financial depression or threat of unemployment. Government operations will be expanded in lean years, and held down in full years of private construction. building industry is regarded as the keystone in the industrial arch because it has so many related and dependent lines, including the lumber, cement, stone, gravel, iron and steel, plumbing supply, roofing material, and other industries. It is almost always the first industry to reflect spreading unemployment.

Building operations were practically stopped during the war. Private building was quickly resumed, and has been going on with a rush since 1921. The government is just about to resume. It is considered in some economic quarters that building has reached its peak and that a sudden downward plunge would inevitably bring unemployment.

#### DEATH OF C. W. RAPP

THE demise of C. W. Rapp, senior member of the firm of C. W. and George L. Rapp on June 28 after a brief illness, came as a shock to a wide circle of friends. Born in Carbondale, Ill., he built up a large architectural practice in Chicago, where among the many important buildings attributed to him are the Uptown, Chicago, Tivoli and Riviera Theaters and the Masonic Temple building, in which is incorporated the Oriental Theater, recently opened, and the new Detroit Theater, in Detroit. Mr. Rapp was in fact, regarded as an authority on theaters, particularly motion picture theaters, and to his foresight and energetic leadership is due a great part of the credit for the improvement which has been made in the designing and planning of these buildings.

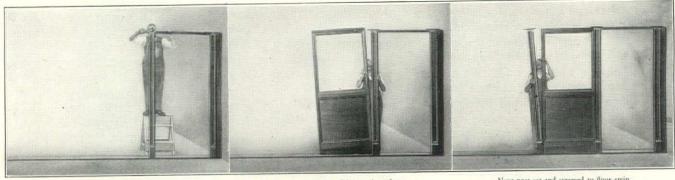
Nor was Mr. Rapp's work wholly connected with theater buildings. The new Paramount Building, now under construction in Times Square, New York; the National Press Building, under construction in Washington; the new Detroit Hotel, and the Metropolitan Office Building in Detroit, and various other large and important building projects in St. Louis, Cleveland, Buffalo, Kansas City and Milwaukee were of Mr. Rapp's design. Under Mr. Rapp's guidance his firm attained a position among those of the first rank in Chicago and the middle west.



Grooved floor strip screwed to floor.

Scribed wall board fits uneven wall.

First door post screwed to floor.



Second door post set.

Section fits in groove of floor strip and post.

Next post set and screwed to floor strip.

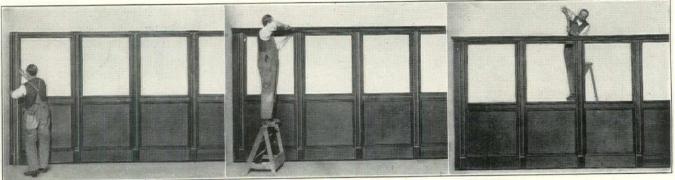
HERE are the twelve important operations in the erection of Telesco Partition. Because it is screwed together and not nailed, it can be taken down as easily as it is erected and moved to any desired location. The extension top takes care of different height ceilings. Write for details.

### IMPROVED OFFICE PARTITION CO.

(Driwood Corporation) ELMHURST, N. Y.

Sales Office: 11 E. 37th Street, N. Y. C.

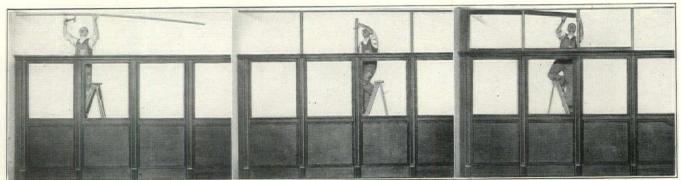
Ashland 7940



Last post fits to scribed wall board.

Screw on crown moulding.

Screw coupling irons to stiffen partition.

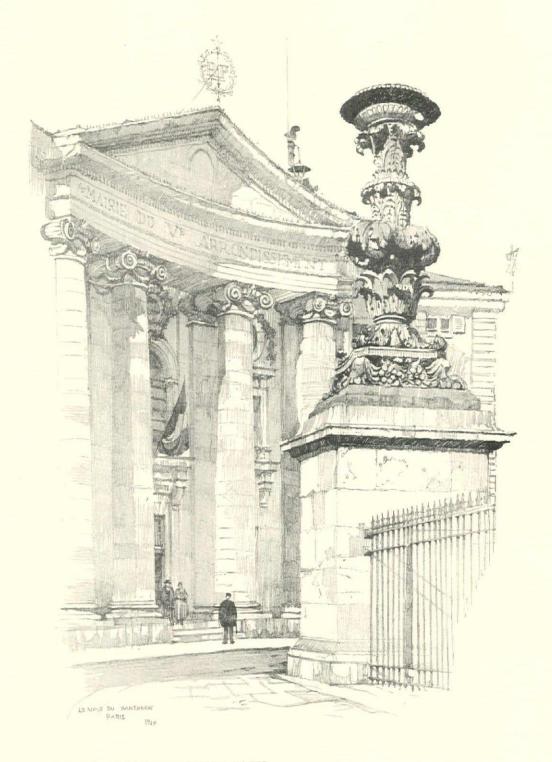


In ceiling partition fasten strip to ceiling.

Raise and fasten extension posts.

Fasten filler strips and attach crown mould.





ENTRANCE TO THE PANTHEON, PARIS
FROM A PENCIL SKETCH BY SAMUEL CHAMBERLAIN

# ARCHITECTURAL FORUM

Volume XLV

AUGUST 1926

Number 2

### Two Recent London Buildings

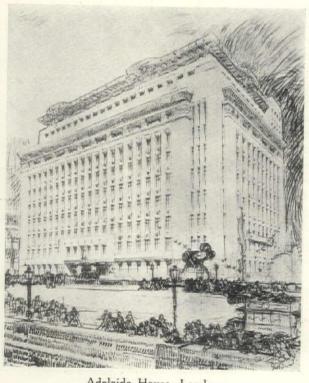
By H. J. BIRNSTINGL.

HOSE who await the appearance of an architectural style which shall inform contemporary London buildings seem to be waiting Recently two very large and important structures have been finished by architects of fame, yet it would be difficult to find in them any common quality. Adelaide House and Britannic House, the one by Sir John Burnet and partners, the other by Sir Edwin Lutyens, strike so forcible a contrast that one is led to assume that there exists no common outlook. It must be admitted that the programs for the two buildings are not identical. Britannic House is the headquarters of a single vast and mighty industrial corporation, and thus it contains within its walls a single hierarchy. Adelaide House, on the other hand, is simply a block of separate business offices, so that when once the spacious entrance hall is passed, there lies ahead but a combed hive of offices. This difference is

quite clearly expressed in the elevations of the buildings, for, in the one. the windows are graded according to the importance of the rooms which they light (this importance depending upon the position in the hierarchy of its occupant), while the exterior of Adelaide House presents a diapered pattern of windows varying but little in sizes, and not at all in importance. But this difference of programs is insufficient to account for the immense difference in treatment. and one can imagine the historian of the future being sorely perplexed in his attempt to disentangle the architecture of today with all its variations.

In architecture, as in literature and the arts generally, the critical faculty is likely to wilt before a famous name, and Britannic House has received an ovation such as would scarcely have been accorded had it been the work of a younger and less well known man,-for the simple reason that it does not merit it. Britannic House is clever,-brilliantly clever. It disarms criticism by reason of its cleverness, and is comparable to the flowery peroration of a gifted politician, skilled in dialectic and rhetoric, and it beats down critical opposition. It is rich and fascinating. It is like a conjuror whose incessant talk absorbs the attention until the climax of the trick is reached. The means are overlooked; it is the end alone that matters. Unfortunately in architecture, especially in the architecture of a huge city, it is not only the end that matters. A picture may have no duty due to its position, no consideration due to its neighbors; a building has both, and un-

restrained individualism on the part of a building in a busy thoroughfare is as out of place as on the part of a person in a crowded railway carriage. Certain conventions must be observed, for upon them depends the smoothness of communal life. But individualistic behavior in the railway carriage may not always take the form of blatant aggression and rudeness; it may take the form of good natured loquacity. or tiresome friendliness displaying itself in a lack of reticence and forbearance. The great new shops of London offend in the former manner: Britannic House, perhaps, in the latter. It



Adelaide House, London Sir John Burnet and Partners, Architects



Photo. Sydney W. Newbery

BRITANNIC HOUSE, LONDON SIR EDWIN LUTYENS, ARCHITECT



Photo. Bedford Lemere & Co.

ADELAIDE HOUSE, LONDON SIR JOHN BURNET AND PARTNERS, ARCHITECTS



Detail of the Entrance

is tiresome and fidgety, but it is certainly friendly and good natured, so that it is difficult to be angry with it; as well be angry with a too-confidential neighbor.

There is nothing cheap about Britannic House. The rich industrial corporation was surely not particular as to spending a few thousands more or less. The setting back of the upper stories, a device which achieves a kind of dramatic effect, is surely an expensive luxury,-and then the carving! Delicate and beautiful, executed by Mr. Broadbent and his assistants, it adorns keystones and capitals, and it is particularly prolific above the sixth story windows. Its presence, one presumes, is a continual secret joy and inspiration to the board of directors, who may indeed deem themselves true art patrons, who have set carving before dividends, for without field glasses it is impossible to observe the detail of the carving from the ground, even now when it is newly finished, and in a year or two it will be completely obscured beneath a rich coating of London's soot deposit. Yes, Britannic House ignores realities, at least so it impresses the spectator, although all criticism of it is subject to reservation, seeing that but half the building is as yet completed.

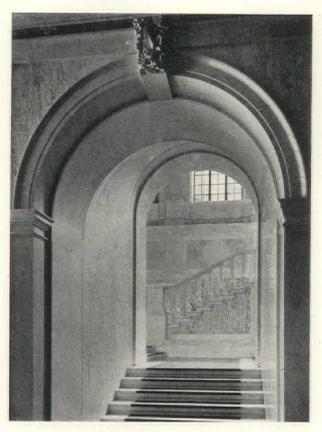
Within there is much to admire. The planning is simple and yet subtle, with its gently curved hall following the line of Finsbury Circus, and its changes of axes due to the irregularity of the site. Within, too, there are ample signs of the exercise of Sir



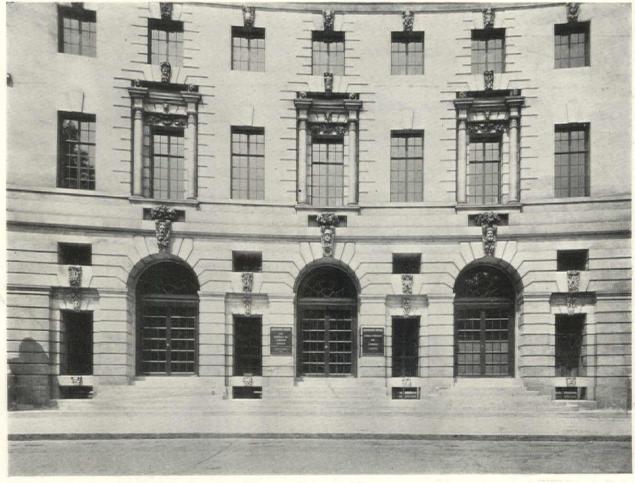
Entrance, Adelaide House

Edwin's fertile imagination. The ground floor hall and corridors are paved with squares of cast iron and white marble. The ceilings are varnished, so that the floor patternings may be reflected therein, -a delightful reversal of the usual procedure, in which the floor is the reflecting surface. Then the staircases are planned from floor to floor on opposite sides of the main corridors. The ascent is thus delightfully broken, and the disheartening sense of stepping into an endless well is avoided. The rubber treads, silent and dark, contrast richly with the white marble of wall and shining ceiling. Each floor is paved in rubber of a distinctive color, surely a pleasant, practical treatment. The equipment of the vast building is throughout in accordance with the very latest practice which science and invention have been able to provide; all service mains, pipes, ducts, and so on are discreetly hidden, while yet remaining immediately accessible. Britannic House shows indeed the meticulous coördination necessary among all the trades and crafts engaged upon a vast modern building enterprise to obtain a finished result.

If Britannic House is personal, Adelaide House is impersonal. That is not to say that anyone seeing it would not at once attribute it to Sir John Burnet, but the approach to the problem is impersonal. Here are certain definite requirements; here is a great city; this is the twentieth century; these are the materials at my disposal;—and



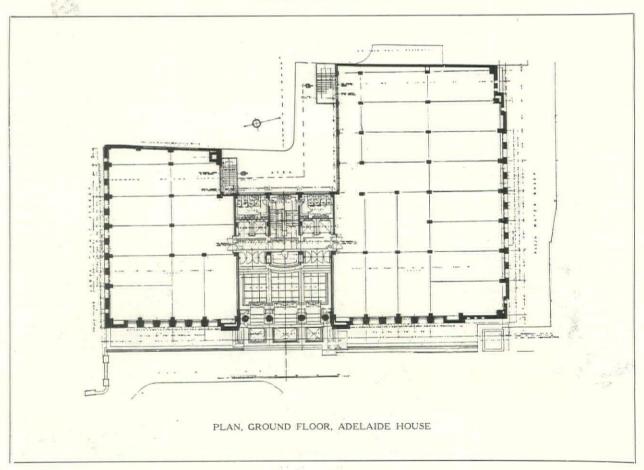
Stairway, Britannic House



Entrance, Britannic House

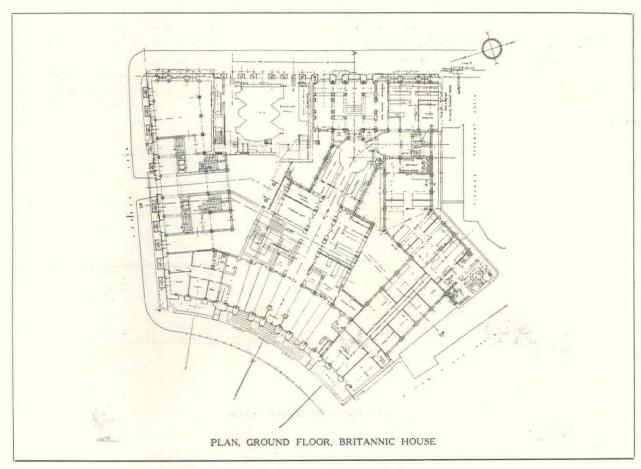


LOBBY, ADELAIDE HOUSE





LOBBY, BRITANNIC HOUSE



Adelaide House is the logical result. If there is romance about the building, and some may certainly find it, it is the romance that certain painters and etchers find in the pulsating activity of iron works, in the starkness of a great ship in its dock, in the disorder of a pit head, but it is not the romance evoked by suggestions of the past. If there is beauty,-and that there almost surely is,-it is the beauty that is found in the motor car, in a piece of smoothly running machinery, in a race horse, — wherever, indeed, there is a balanced synthesis of form, purpose and material. And moreover, there is grandeur, there is sim-

plicity. If you fail to like it, if its crudeness offends you, then you are out of touch with the century in which you live. "Love me, love my dog" is an adage which might here be recast: "Love my age, love Adelaide House." But it is expressive of the best of the age, for there is nothing vulgar about Adelaide House, and vulgarity is a besetting sin of the age. Adelaide House has its counterpart in other art forms, in music, in painting, and in sculpture, and wherever they are met they are somewhat startling and are likely to frighten the timid and to distress others, but to the robust they are invigorating. It is as yet impossible to prophesy

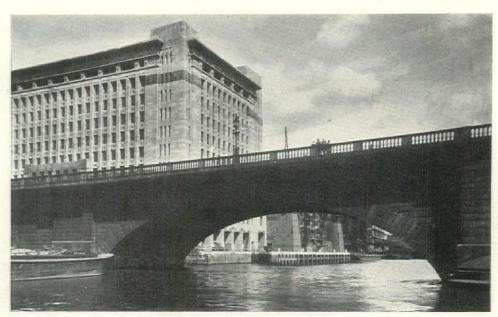


Stairway, Britannic House

how the future of architecture will develop, but there is a future along the lines of Adelaide House; there is no future along the lines of Britannic House, which must ever remain an entirely personal utterance.

Despite the novelty of Adelaide House, it harmonizes with its neighbors, and this is because the parts are small and are kept in scale with the human form. It impresses without overawing, and seen from London Bridge it has a truly majestic dignity which will be enhanced when the crowning upper story takes its place above the cornice. The building is steel-framed; the lower story is faced with granite and stone.

Perhaps after all it is incorrect to say that these two new buildings have no common quality, for they at least have this:—they are both alive. Neither of them is a pastiche; in neither is there any sign of that febrile searching in books and portfolios for motifs which unfortunately distinguishes so much contemporary architecture just now, and this is because both buildings are the work of men who are fertile with ideas. If we feel that one will have a greater influence than the other, it is but the expression of a personal opinion which time will either confirm or contradict. Both Britannic House and Adelaide House are English architectural achievements.



Adelaide House, from the Thames

#### St. James' Church, Winsted, Conn.

COFFIN & COFFIN, Architects

By KENNETH FORD COFFIN

"What an image of peace and rest Is this little church among the graves! The wounded spirit, the heart oppressed, Here may find the repose it craves." HERE is "this little church" which Longfellow so beautifully describes? For the benefit of those who are not students of the immortal poet, the answer is,—in England. But this is not surprising, for even the English admit that all Christendom is envious of the beauty and antiquity of their parish churches, an admission not in the least exaggerated in spite of the ravages of time and civil war, religious differences, and unsympathetic remodeling. Among the justly envious the United States deserves a front rank position, which in less critical moments is attributed to the adolescent stage of our national growth. Although we are undoubtedly far ahead of these early church builders in general taste and refinement, as measured by the

Of all the various Protestant denominations in this country, the Episcopal Church has the greatest heritage from England, and it is accordingly logical for this body to turn there for architectural inspiration and example. Winsted is an old New England town, and at first thought it might seem appropriate to follow there the best church precedent we have,—that of our colonist forefathers. Their places of worship were, from necessity and choice, boldly different from those of their English ancestors, and admirably adapted to new and varied conditions. But the fierce flames of bigotry, which changed even the architecture during that period, no longer burn to effect such contrasts in modern church design here in America.

scope of arts and sciences, we are their inferiors in "the application of architecture to its highest pur-

pose;" in church architecture we have much to learn.

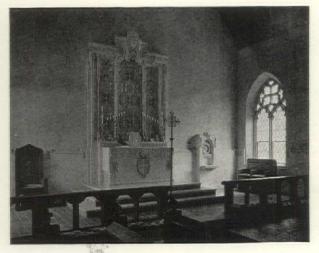
Furthermore, Winsted nestles among rugged foot-

far wilder and hills, more primitive than their serene and majestic neighbors, the Berkshires, an environment which suggests the use of stone. A so-called Colonial church would surely be too sophisticated for this town, famous for extremes of nature, with its six-legged cows and its mushrooms as large as cabbages, if one can believe the newspapers. Along with the other freaks of nature which give Winsted her place in the sun is the local field stone, used primarily for pasture fences, and undoubtedly the least desirable of all building stones. It is a large, rounded, black cobble, with little variation in tone or texture, and as hard as flint. Use of this black sheep among building materials was carefully avoided in the original specifications for the new church, colorful and stratified granite having been chosen instead. Church building funds, however, have their limits, and in this case the limit was reached before the more expensive material could be included. White marble and red sandstone were available in this vicinity, but both of these were obviously unsuitable for an informal building of the type proposed. A blank stone wall had literally been reached and, as the least of these evils, field stone was finally used. The flintlike character of this cobble stone recalls to memory the numerous parish churches in the southern counties of England, some even within sight of the portals of Canterbury, built of small, black flints, which have successfully defied time and weather. The contemplation of these charming English churches encouraged the use of the local field stone, and the design of the building was largely governed by a desire to be in sympathy with use of this unusual material.

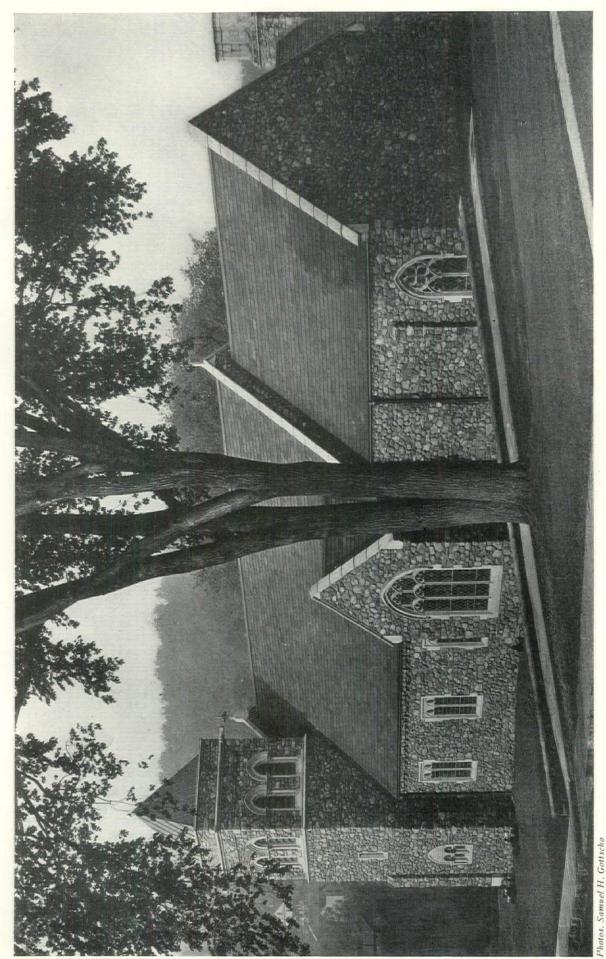
Instead of using merely one style or type of ecclesiastical architecture, several related styles were adapted with results suggesting the English parish churches which recall the various periods of history during which they were built. Departure from use of one style or period throughout a church is not favored by architectural purists, but in this cosmopolitan era such liberties are sometimes justified if unity is the result. From the simple Norman tower to the more elaborate Late Gothic chancel the progression in architectural style was intended to be gradual and appropriate to the function of each part

of the plan of the church.

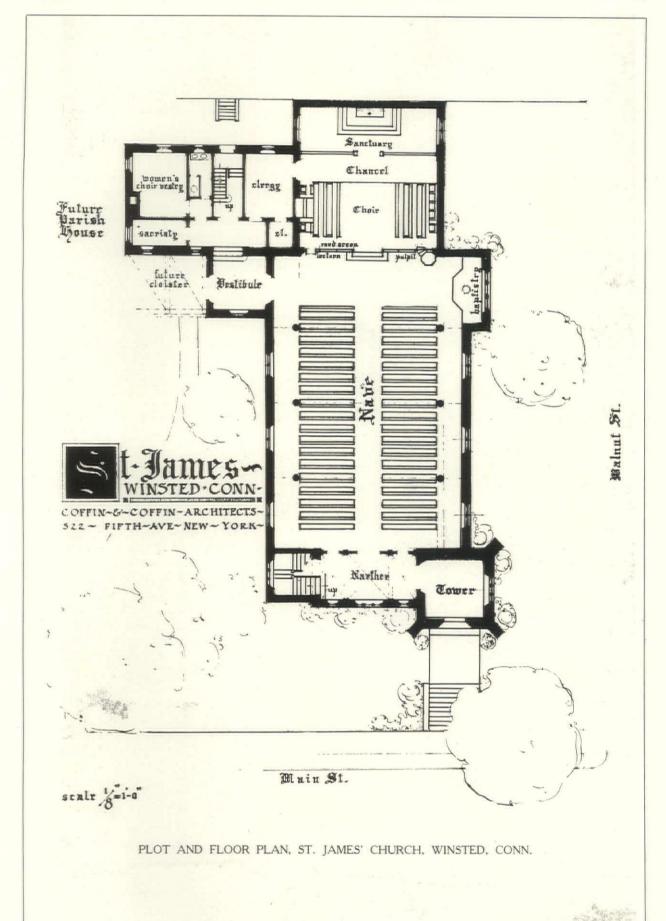
Possession of a corner plot determined the general shape and distribution of the elements of the plan, but the traditional method of orientafor an English church, with the chancel at the east end, was disregarded. The modification of ancient and established laws, changes in the form of service, and expansion of functions to meet modern mands, while often the cause of much dissension

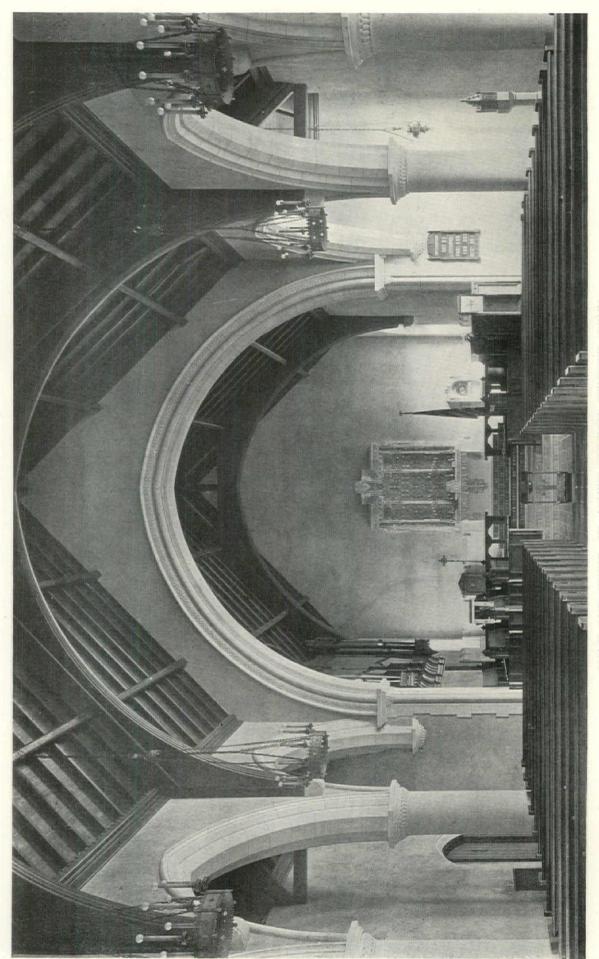


Sanctuary and Altar, St. James' Church, Winsted, Conn.

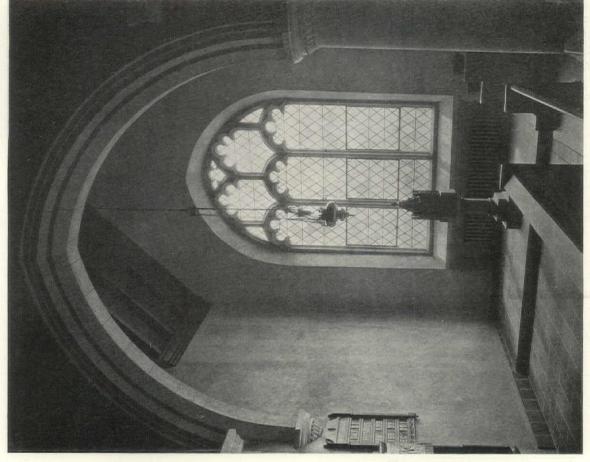


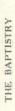
ST. JAMES' CHURCH, WINSTED, CONN. COFFIN & COFFIN, ARCHITECTS

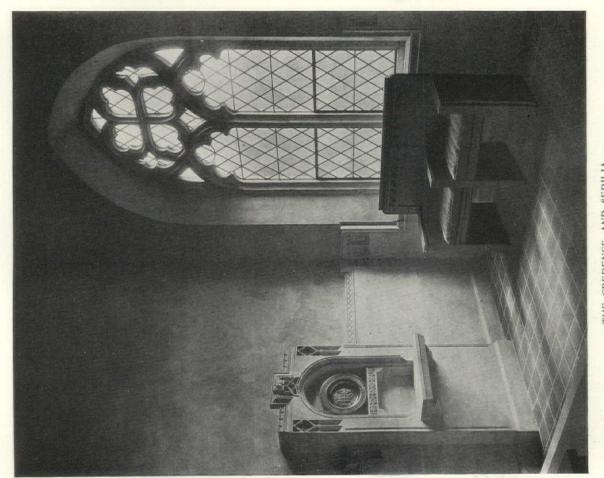




NAVE AND CHOIR, ST. JAMES' CHURCH, WINSTED, CONN. COFFIN & COFFIN, ARCHITECTS







THE CREDENCE AND SEDILIA DETAILS, ST. JAMES' CHURCH, WINSTED, CONN. COFFIN, & COFFIN, ARCHITECTS

and debate among theologians, at least prevent too accurate reproduction of the old buildings and stimulate originality in design. A column or pier which is gratefully welcomed by drowsy and apathetic parishioners is too often the cause of much annoyance and dissatisfaction to their more attentive brethren. These obstructions may be avoided by using a long, narrow nave or one short and wide, but the former plan is usually impractical for good acoustics, and the latter a handicap to both beautiful and economical design. To overcome these objections in the new St. James' Church, and at the same time to create a resemblance to the column and arch construction customary in the English type, the narrow side aisles were arranged without seats, and for circulation only.

The costly clerestory, however, was omitted for the sake of economy and as an aid in eliminating damp walls, but of course at the sacrifice of that atmosphere which contributes so much to the charm of old structures. The heavy columns with their slightly pointed arches springing from them are similar to those used in the transitional period between the Late Norman and Early Gothic, and were not used merely for effect but serve a definite structural purpose. They shorten the span of the oak roof trusses, and take the concentrated load, while the exterior walls receive their thrust and perform the same work as the picturesque flying buttresses. By employing this simple form of construction to meet practical requirements, a resemblance to the interiors of the old churches was maintained though not duplicated. Omission of the clerestory suggests a dark nave, but here the windows on the narrow side aisles give ample light without destroying that mystery in the depth of shade and shadow so needed.

The parishioners interested themselves in the construction and furnishing of this church in somewhat the same spirit of sacrifice which accompanied the furnishings of the old structures. The altar, the colored faience tiles in the chancel floor, the organ, the stained glass windows, and innumerable other fittings were generously contributed by them. Generosity seems customary in Winsted church circles, however, for a story is current there to the effect that one of their clergymen was presented with a new pair of trousers by the ladies of the Home and Foreign Missionary Society. In his address of thanks he undoubtedly alluded to Psalm 139:2:

"Thou knowest my downsitting and mine uprising: Thou understandest my thought afar off."



View from Northwest, St. James' Church, Winsted, Conn.

#### George Harrison Phelps, Inc., Building, Detroit

SMITH, HINCHMAN & GRYLLS, Architects

N office building and studio, located at the northwest corner of East Jefferson and Joseph Campau Avenues, is the new home of George Harrison Phelps, Inc. The new structure is most unusual in character and an innovation for Detroit. New York and Chicago have private office buildings of a similar nature, which have been designed for the use of individuals whose professional needs require considerable space for their staffs of assistants. Heretofore in Detroit such needs have been met by remodeling large residences in districts where business expansion has altered the neighborhoods, or by using ordinary office spaces in new or old buildings,—spaces sometimes adequate, but often not.

In planning the new building for George Harrison Phelps, Inc., it was desired to develop a structure suitable in every respect for the needs of a highly departmentalized advertising organization of 106 people, and, in addition, to produce a building distinctive, interesting and beautiful,—a structure that would compel attention, cause admiration, and serve in a dignified way as the home of the organization. That was the problem presented to the architects, Smith, Hinchman & Grylls. The usual solution would have been a three-story, box-like structure, punched full of holes for the various windows, topped with or without the usual cornice, etc., and the result would have been the ordinary building which may be seen on any business street in any city.

With an owner desirous of avoiding building such a structure, and more than willing to assist in developing the architects' suggestions, the result shown in the accompanying illustrations was attained. The building is set back from the Jefferson Avenue street line about 30 feet, on a brick-walled terrace. This allows space for planting, and removes the offices



Reception Room, George Harrison Phelps, Inc. Building

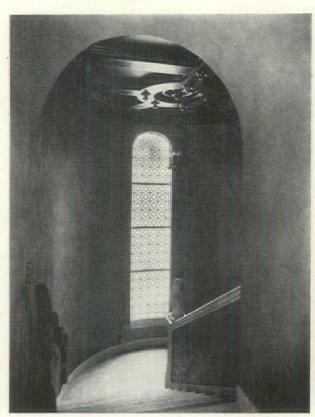
from the noises of Jefferson Avenue. Rising behind the trees is a facade of brick and stone, not a flat, box-like face, but a facade irregular in outline, that expresses the plan within. The architectural character of the design is a modified form of that brick architecture found in northern Italy, dating from the time of the middle ages and the early Renaissance. A well marked door and terrace of stone indicate the public entrance. To the left is a semi-circular bay, where the stair tower shows itself. To the right, extending up through the second and third stories, is a double-arched opening with a column of marble forming a balcony and great window for Mr. Phelps' studio. These three features on the exterior are set off by the smaller office windows, which have been grouped to avoid the monotony of regular spacing. On the Joseph Campau Avenue side various smaller architectural features of interest are apparent.

The walls are of brick varied in color, soft in texture, and laid in pairs to produce the effect of a long Roman brick, with mortar joints 1 inch thick. The stone trim is likewise varied in color and texture to harmonize. The roof is of tile, in shingle form, hand-made, with a variety of color and exposures. The windows are fitted with metal casements with leaded glass. The general structural work is fireproof, with reinforced concrete frame and floors. Mechanical equipment and facilities are of the best and include oil-burning steam heating plant and a well arranged private telephone system.

On entering the building through the vestibule, one steps into a public reception room, finished with travertine floors, antique plaster walls, and a beamed ceiling treated with polychrome stencils. This room

provides for an information, telephone and telegraph desk in an alcove and a waiting space for visitors. It gives access to the business offices on the first floor and to a fine stairway leading to the studio and second-story offices. This stair hall is similar to the reception room in materials used, except for the ceiling, which is of coffered wood panels with applied color. At the head of the stairway is a library and office for Mr. Phelps' secretary, as an anteroom to the studio, the room which by nature of its use, location and size gives to the exterior a dominating feature. It is two stories high, having a barrelvaulted ceiling, with penetrations along the sides, and decorated in full color. The walls, almost unbroken by windows, because of the great window looking out over the balcony, offer excellent spaces for the fine old furniture and wall fabrics belonging to Mr. Phelps. At the end opposite the great window there is an old Italian stone fireplace, its design in keeping with the style and scale of the room.

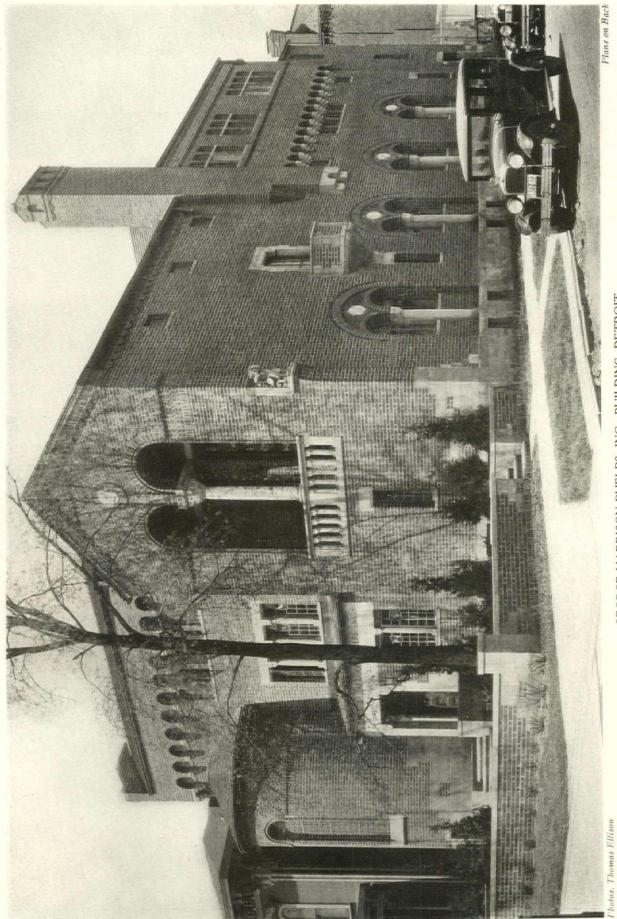
In addition to the special rooms just described, the first and second stories contain a dozen or more private offices for the various executives, with a mailing room and barber shop on the first floor and library and conference room with a kitchenette on the second floor. The third floor provides for the bookkeeping and clerical forces, vaults, the auditor, the dictaphone, and statistical departments. The basement has, besides the usual heating plant and storerooms, a five-room apartment for the caretaker; and, most unusual, a regulation-sized squash court with dressing, locker, shower and rubbing rooms. In connection with these athletic facilities there is an open-air volley ball court at the rear of the building.



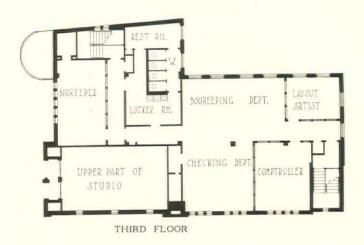
Stairway, from Second Floor

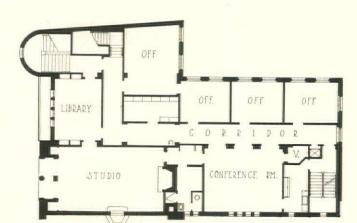


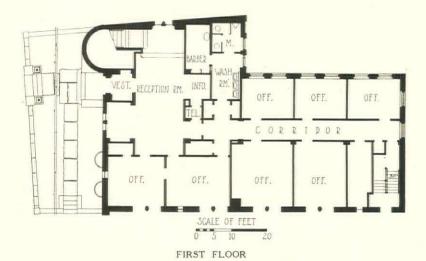
The Foot of the Stairway



GEORGE HARRISON PHELPS, INC., BUILDING, DETROIT SMITH, HINCHMAN & GRYLLS, ARCHITECTS

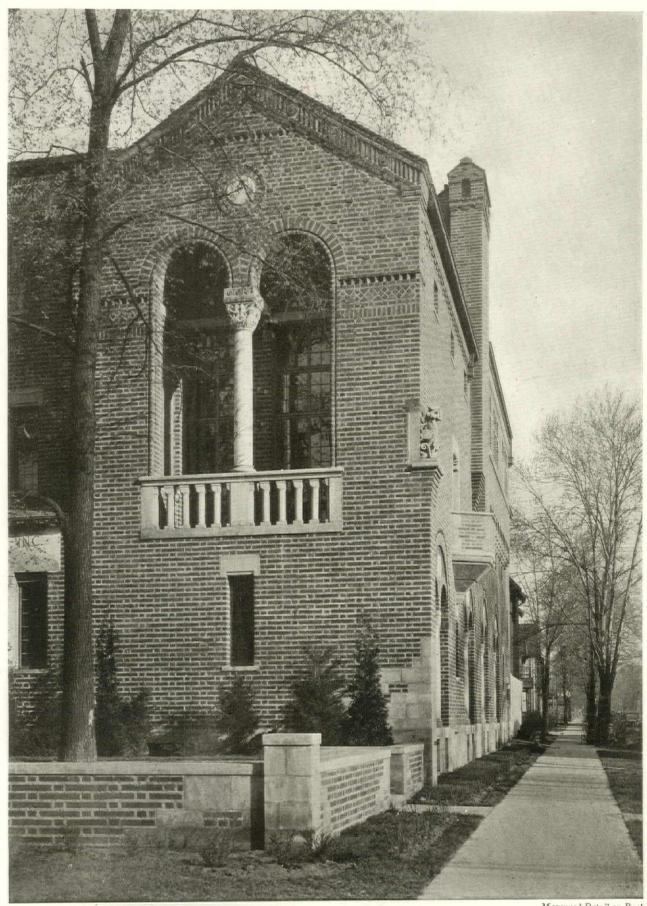






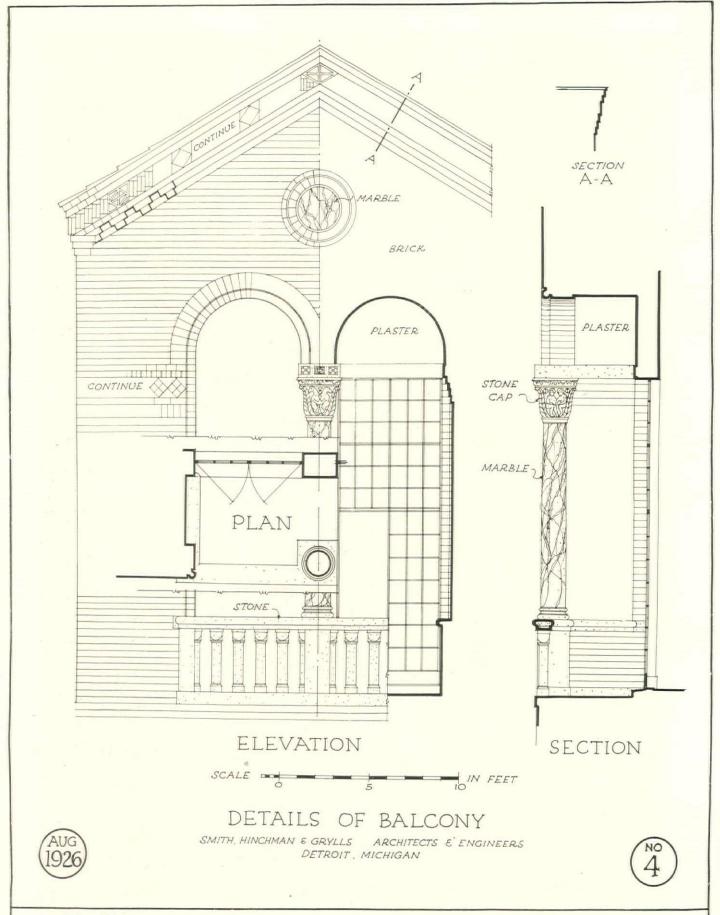
SECOND FLOOR

PLANS, GEORGE HARRISON PHELPS, INC., BUILDING, DETROIT SMITH, HINCHMAN & GRYLLS, ARCHITECTS

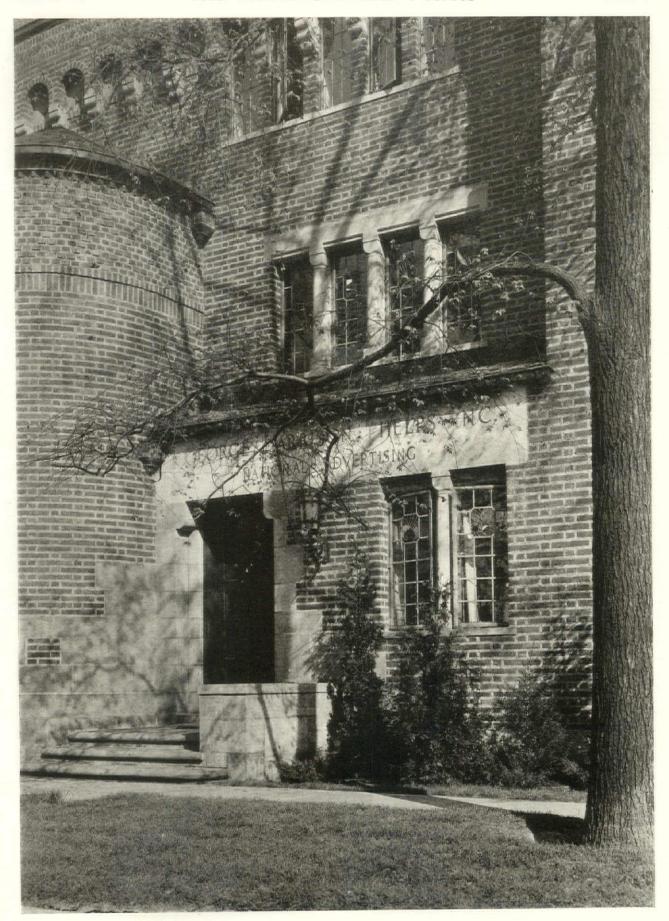


Measured Detail on Back

GEORGE HARRISON PHELPS, INC., BUILDING, DETROIT SMITH, HINCHMAN & GRYLLS, ARCHITECTS



## The ARCHITECTURAL FORUM DETAILS



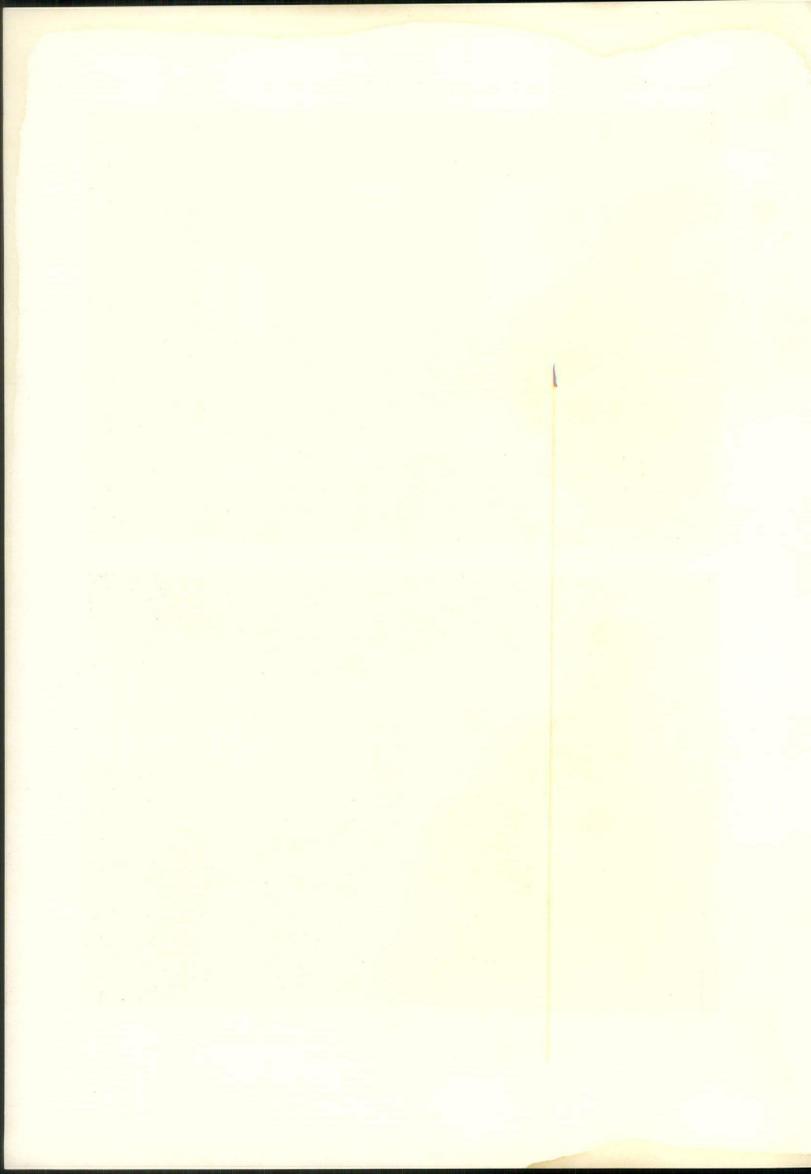
THE ENTRANCE
GEORGE HARRISON PHELPS, INC., BUILDING, DETROIT
SMITH, HINCHMAN & GRYLLS, ARCHITECTS







TWO VIEWS OF MR. PHELPS' STUDIO
GEORGE HARRISON PHELPS, INC., BUILDING, DETROIT
SMITH, HINCHMAN & GRYLLS, ARCHITECTS



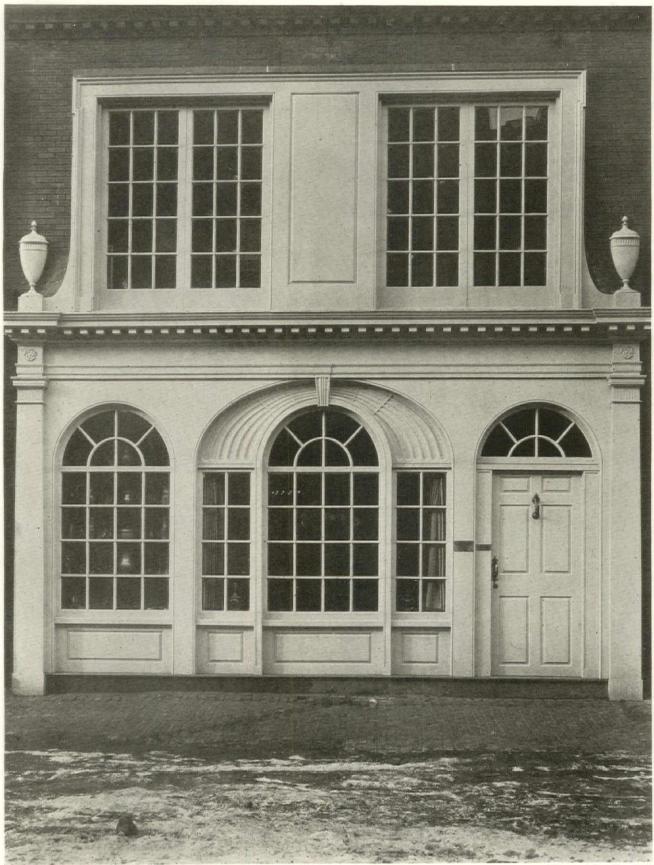


RECEPTION ROOM, LOOKING TOWARD STAIRWAY



CONFERENCE ROOM
INTERIORS, GEORGE HARRISON PHELPS, INC., BUILDING, DETROIT
SMITH, HINCHMAN & GRYLLS, ARCHITECTS

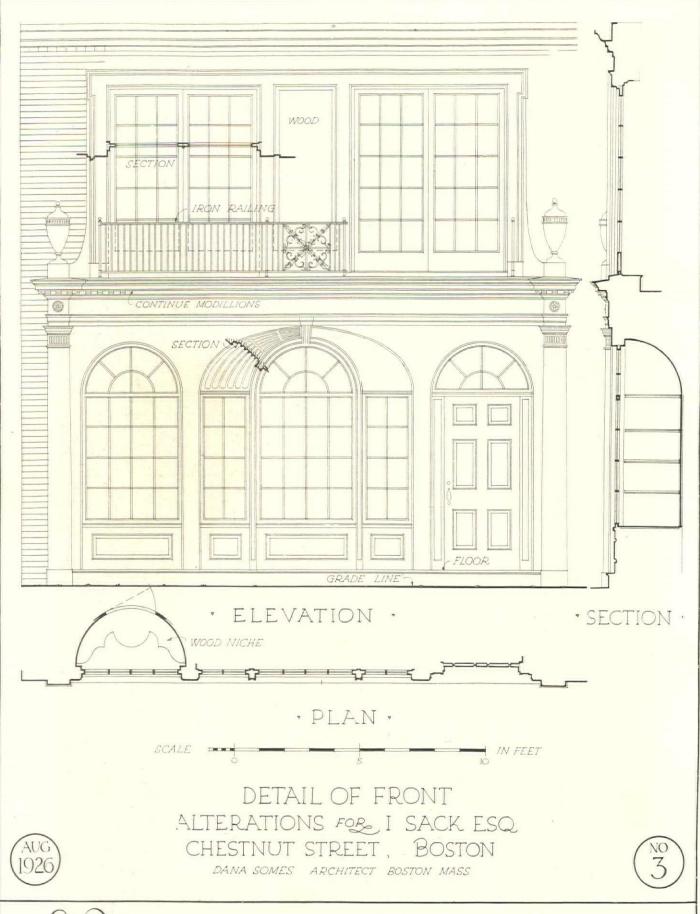




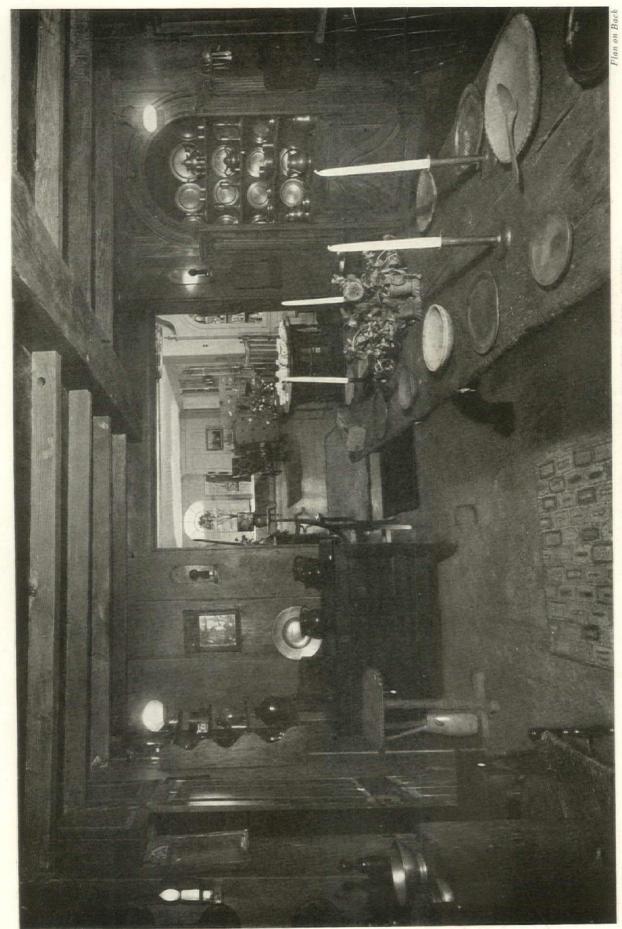
Photos. Shaw Photo Service

THE KING HOOPER SHOP, CHESTNUT STREET, BOSTON DANA SOMES, ARCHITECT

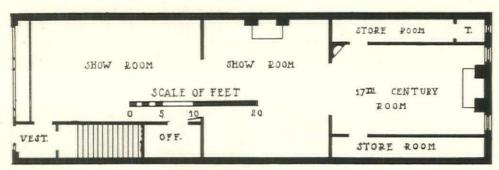
Measured Detail on Back



The ARCHITECTURAL FORUM DETAILS



SEVENTEENTH CENTURY ROOM, THE KING HOOPER SHOP, BOSTON DANA SOMES, ARCHITECT



PLAN, KING HOOPER SHOP, BOSTON DANA SOMES, ARCHITECT



MAIN SHOW ROOM



MIDDLE SHOW ROOM
INTERIORS, KING HOOPER SHOP, BOSTON
DANA SOMES, ARCHITECT



#### The Historic Cathedral and Library, Vincennes, Ind.

By THOMAS E. O'DONNELL
Assistant Professor of Architecture, University of Illinois

WO of the most interesting historic buildings of the middle west are to be found in the once noted but now almost forgotten Indian-French town of Vincennes. The old St. Francis Xavier's Cathedral, now a parish church, and the Cathedral Library which adjoins it, are silent reminders of a period in American history when this community played an important part in the affairs of the old Northwest,—an early outpost of civilization.

Long before our forefathers reached the shores of this continent, the Wabash River was well known to the Indians, and the spot where now is located the city of Vincennes, was one of their favorite haunts. The land, which was covered with light brushwood, could be easily cleared, and the rich, sandy soil was tilled with little labor; consequently, it was the natural location for an Indian village. This Indian settlement became known to the white man through the French explorers and missionaries. Of all the early explorers to visit the American continent, none were more daring or zealous than the French. Zeal for establishing missionary posts and for converting the Indians caused them to penetrate the wilds of this section of the country. A "Missionary of the Cross" always accompanied the French soldiers and explorers, wherever they went to establish trading posts and settlements. The French made their first permanent settlement in Quebec in 1608. From here they worked westward and southward. They made a settlement at Detroit in 1670, at Kaskaskia in 1673, and it is almost certain that the black-robed Jesuits visited the Indian village on the site of the present city of Vincennes before 1700. Old records collected from Kaskaskia and other early French mission centers give evidence that the town now called Vincennes and the French Catholic church there were in existence in 1708, and probably earlier.

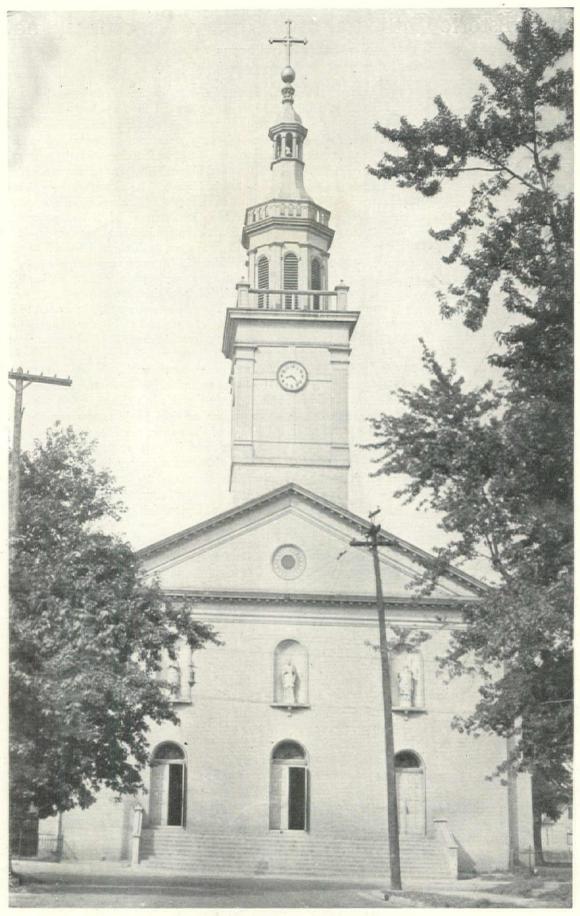
Whatever the exact date of settlement, Vincennes is a very old city, and although now of comparatively little importance, she has had a distinguished past and her place in American history is firmly fixed. She was destined to become the most important and permanent of all the French missionary posts in the Mississippi Valley. The place is of more than general historic interest to us because here, at different times, the flags of three nations have been unfurled, -- those of France and England, and since 1779 that of the United States. Long before Chicago was even a village Vincennes was considered a city. The comparative importance of the two places in the early days is brought out by an old document, quoted by an early writer, in which it is said that the village of Chicago petitioned the city of Vincennes for the purpose of opening a road connecting the two centers.

Vincennes also bears the distinction of being the first cathedral city in the state of Indiana and one

of, if not the first, in the whole Northwest Territory. It is because of this fact that we have coming down to us today the two unusual and important examples of early American architecture. The first St. Francis Xavier's Church, which is said to have been founded about 1702, was of the stockade type with a thatched roof. The altar and other details of furniture were crude affairs, made on the spot with primitive tools and the aid of Indian converts. In 1785 Father Gibault built a new log church, 42 by 90 feet, which was used until about 1830. The present church edifice, which stands very near the site of the earlier churches, was projected by Father Champomier in 1825, and the cornerstone laid on March 30, 1826. By great sacrifice and labor the work of construction was continued by the local adherents of the church from 1825 until 1834, when, upon the arrival of Bishop Brute, it was destined to become a cathedral, seat of episcopal rule for a vast region.

It is not known who designed the structure, but it is most likely that Father Champomier, who was in charge of the original project, was responsible for the design of the earlier portion, while Bishop de la Hailandiere was in part responsible for the later additions, although a master builder was no doubt in charge of the actual construction. The Vincennes Cathedral is similar in many respects to the cathedral at Bardstown, Ky., which was built ten years earlier, and for that reason some of the church officials are of the opinion that one designer may have been responsible for both buildings. There is preserved in the Cathedral Library an original drawing showing the design of the structure as it was originally planned. The name of the designer does not appear on the drawing. By comparing this original drawing of the structure and the building as actually completed, it is seen that the design was carried out in most respects, except for the arrangement of entrances at the front. The original drawing shows that the main or front facade was to have had three large windows, similar to those on each side of the church, and that it was originally intended to have two side entrances, one on each side near the front.

A measured plan of the Cathedral, as it stands today, is included here. Although small and simple enough in its parts, it displays nevertheless, characteristics which clearly mark it as a building of distinction, especially when we consider its early period and the pioneer conditions of the country at the time it was built. It consists of a nave and two aisles, the nave being divided by rows of columns from the aisles. These columns, eight in number, are 2 feet in diameter and 28 feet high, and are of a simple Doric-like type, without entasis. They are constructed in a manner quite in keeping with their period, being made of solid tree trunks, especially se-



THE OLD CATHEDRAL, VINCENNES, IND.

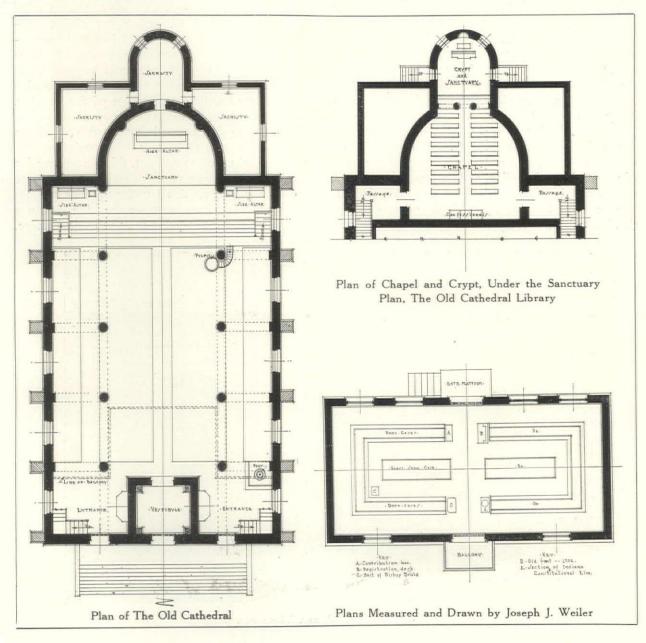
SERVED AS THE CATHEDRAL OF A VAST REGION FROM 1834 to 1895; NOW USED AS A PARISH CHURCH

lected for the purpose, which after being shaped as desired were lathed and then plastered. On the walls are pilasters of like proportions and construction. The columns carry wooden arches, spanning from column to column and from columns to wall pilasters. The ceilings of the side aisles, between the wooden transverse arches, are flat, while that over the nave and apse is in the form of a wooden vault, which is flattened at the top. The construction of these ceilings and vaults is quite singular in that they are at once insulated and semi-fireproofed by means of a layer of clay mixed with straw, of several inches in thickness, placed over their entire area.

The sanctuary, which is of generous proportions, is raised five steps above the level of the nave. It contains the high altar and two side altars. From the side aisles, stairways lead down to the chapel and crypt below the sanctuary. Back of the sanctuary are the sacristies. The organ loft, which is over the main entrances, is shown by dotted line on the accompanying floor plan. It has been enlarged at some

later period, a fact that is evident from the change in design of the railing, and an organ has also been installed in the loft. Perhaps the most distinctive feature of the old cathedral church consists of the crypt and chapel below the sanctuary. This is an unusual feature in American church architecture, especially in the smaller churches of early times, and can be traced, in this instance to French influence.

Architecturally, the exterior of the old Cathedral is very plain and simple. The front facade, however, is quite effective with its three arched doorways, above each being a niche filled with a statue. In the niche over the central doorway stands a statue of St. Francis Xavier, to whom the Cathedral was dedicated. The statue in the niche over the doorway to the left of the center is of St. Joan of Arc, and in that to the right is a statue of St. Patrick. Crowning the whole facade there is a plain pediment with an effective cornice, and rising above this is the clock tower and belfry terminating in a slender spire, the total height being about 140 feet. This was the



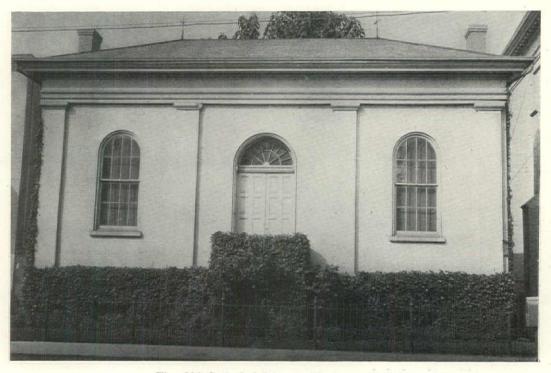
last main exterior feature added to the Cathedral and was built between 1840 and 1847 under the direction of Bishop de la Hailandiere. Structurally, this tower is of considerable interest. It is carried upon heavy masonry walls, square in plan, which are 2 feet in thickness and carried up to the attic of the structure. Within the four angles of this tower are set up heavy vertical wooden timbers which are, by means of splicing, made continuous through the entire height of the tower. These are made more firm and rigid by being framed, in stages, with heavy horizontal timbers and crossed bracing on all four sides. All of the tower and spire which appears above the roof is of wooden construction. The tower contains a clock, installed soon after its erection, which is said to be of French make, and which is still in use. This tower also contains the first bell brought to Vincennes and used in the former church edifice. The bell was cast in France, shipped to New Orleans, and from there brought on a flatboat up the Mississippi, the Ohio and the Wabash to Vincennes.

The side walls of the church were originally very plain, being relieved only by five simple window openings on each side. The Gothic-like buttresses which are now in place down each side were added in 1908 to stiffen the old brick walls which were spreading outward, due to settlement or other structural difficulty. The glass in the windows was originally of a frosted variety, of small diamond-shaped panes set in lead, and at the center of each was the figure of either a cross or a star. The entire window area was divided into two vertical panels by means of a central wood mullion, and the top of each panel was formed by a large circular area of colored glass. The extent and arrangement of the apse and sacristies, built about 1841 by Bishop de la Hailandiere at

the rear of the earlier structure, give accent to this important part of the old Cathedral. The interior is quite in harmony with the exterior. Simple in construction and arrangement, it depends for interest entirely upon the richness of the altars, furnishings and wall paintings mellowed with age, all of which, when seen in a subdued light, impart to the interior something of the glory of the smaller Old World cathedrals. The whole structure, in spite of its naïve simplicity and almost archaic quality, has a certain dignity and charm about it that are in keeping with its one-time considerable importance in America.

The most important adjunct of the cathedral was the Cathedral Library, which was established at an early date, probably soon after 1834, when Bishop Brute took charge. Many of the best books belonged to him, and it is to this bishop and his successors that we are indebted for the collecting and preserving of the old records, documents and books. This library served the bishops in a practical way in the training of young men for the priesthood. library building, which stands close to the cathedral church, was built in 1840. It is a simple brick structure, rectangular in plan, 40 by 20 feet, and harmonizes well with the larger structure, although it shows classical tendencies in its pilastered treatment. It exhibits a refinement and restraint that are pleasing and express admirably the purpose of the building. The entrance doorway is not on the street facade but on the opposite side, access being possible only from the private grounds at the rear. Although now preserved as a historical monument, this library was for many years in regular use by young men who were studying for the priesthood under the bishop.

These two buildings, together with the treasures which they house, constitute a most valuable heritage.



The Old Cathedral Library, Vincennes, Ind.

#### New Apartments from Old Houses

By ROGER WEARNE RAMSDELL AND HAROLD DONALDSON EBERLEIN

HE title, "New Apartments from Old Houses," may, perhaps, convey a certain glamorous suggestion of "new lamps for old" and all the Eastern magic familiar to us from the pages of the "Arabian Nights." The magic of converting old houses of unalluring character into agreeable apartments, however, though quite as successful in achieving its ultimate results, is not of the instantaneous sort wrought through the instrumentality of talismans and obedient genii but is clearly traceable, at every step of its progress, to the combined common sense and creative imagination of everyday mortals prompted by the necessity of meeting a definite social and economic present-day condition.

The project of alteration has two distinct aspects. The one is purely architectural, while the other is economic and civilly reconstructive. The former calls into play the faculties of invention and insight into the latent opportunities offered by certain types of dwellings that have outlasted the functions for which they were originally destined, due to a variety of causes; the latter has to do with the problem of reclaiming decayed neighborhoods and other "waste areas" in our large cities, a matter that is yearly becoming more and more important. The two aspects are closely linked in some ways, but not so inseparably that we cannot consider them apart, and for our present purpose it is desirable to discuss them independently, however much both may tend to a common end, regarding first the architectural question, and afterwards taking into account its bearing with reference to "waste areas," found in every city.

The two instances here presented where apartments have been created by remodeling dwelling houses are both in New York, one at 420 East 50th Street, the other at 180 East 75th Street. In each case the waste space contained in the original buildings was utilized so that a vastly greater amount of service was derived from exactly the same area. The general characteristics of the kind of plan followed in the average city house of from 40 to 60 years ago are sufficiently familiar, so that there is no need for comment on that score. Inspection of the accompanying plans will show to what an extent interior structural changes have been necessary, and how far the rehabilitation has been achieved by merely a slight rearrangement of previously existing divisions or by the addition of partitions therein. In a process of this sort the readjustment of staircases, with means of separate access to the several apartments, is likely to be one of the chief difficulties to be surmounted. Well directed ingenuity, however, can cope with the problem successfully, as these instances illustrated prove. Number 420 East 50th Street, in its present form, contains three apartments. Apartment 1 is a "duplex," comprising the old basement and next two floors. Apartment 2 is another duplex, occupying what were originally the third and fourth floors of the dwelling, and Apartment 3, consisting of a single story, is made up of a living room, two bedrooms, a bath, a kitchenette and a maid's room, all on the top floor. The main staircase retains its original place in the plan and, although it is intended primarily to serve the main entrances of the several apartments, there is also emergency access to it from every floor. Thus the solution of the chief problem.

The only outside alteration affecting the interior arrangement was the removal of the high flight of steps from the sidewalk to the front door on the main floor. The old basement entrance, at the street level, then became the front door, while the former vestibule and front hallway made room for the owner's bath and a large storage closet. In the course of remodeling the old front basement was made the dining room of Apartment 1, enough space being reserved for the entrance hall and the first run of the main staircase. The old basement kitchen, at the rear, was at the level of the back yard, and was the logical place for the owner's living room on account of its size, pleasant southern exposure, abundant light and proximity to what has now been turned into an agreeable garden from an erstwhile desolate tract of sheer ugliness. In the readjustment the sub-basement beneath has become the kitchen, and is abundantly lighted from a wide grated areaway outside the living room windows and garden door. A private staircase, ascending from the corner of the living room, connects the ground floor and main floor in Apartment 1, while another private staircase connects the two floors of Apartment 2, so that there is complete internal communication in these two apartments without using the main staircase. Apartment 3 has only one floor, and is reachel by the main staircase, so that there is no occasion for any independent stair provision. The common heating arrangements, with coal storage and the maids' bath, are in the subbasement, the only actual basement, with the kitchen of Apartment 1. Thus the planning of utilities.

At 180 East 75th Street the exterior changes were far more extensive. The high steps leading from the sidewalk to the main floor disappeared, as in the former instance, and the basement door at the street level became the chief entrance. But in addition to this, the whole facade of the building was changed by removing superfluous projections once considered ornaments, laying a stucco jacket over the dingy brown stone, and manipulating the factors of illusion so that the front assumed a totally different expression, although no drastic structural alterations were involved in the process of transforming the building.

In the rearrangement within, the old basement, which, as already said, was on the street level, be-

came the ground floor and was so divided that it contains in front a bedroom, a bath, and the private entrance and staircase of the first apartment, the living room of which is immediately above the bedroom and occupies most of the space devoted to the drawing room in the original plan. The private vestibule of the second apartment opens from the common entrance hall on the ground floor and gives access to a large living room with full length windows overlooking the garden, which from its previous dreary estate has been converted into a place that is really sightly and agreeable, as a garden should be, and as even a city garden can be. Directly above the living room are the bedroom and bath of

the second apartment. The ground floor and first floor are thus occupied by two very agreeable small "duplex" apartments. The upper floors are somewhat differently arranged, but each duplex apartment has its own private stairway as well as access to the main or general staircase and its hall on each floor.

It now remains to view the economic aspect of the situation. To begin with, anyone at all familiar with conditions in our large cities cannot fail to be aware of the existence of many districts that may be called "waste areas," "decayed neighborhoods," "inactive sections." or whatever other name can be devised that seems more accurately to define their status. Such localities perhaps once enjoyed high



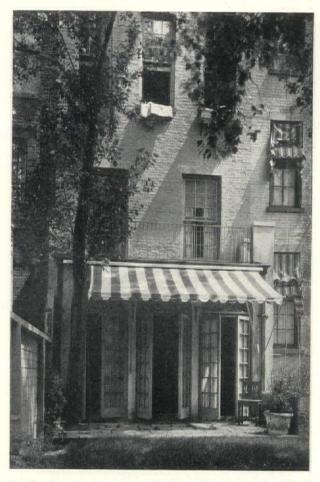


House at 180 East 75th Street, New York

Before Alterations

popularity as desirable places of residence, but subsequently lost their prestige. Sometimes the change can be traced directly to certain altered economic conditions. There may have been a gradual invasion of small shops, or else the relentless advance of great mercantile and manufacturing interests may have crowded in too closely, disquieted the residents and sent them trooping elsewhere, leaving "backwaters" untouched by the current of commercial onrush and yet bereft of their former tenants and sources of upkeep. Again, the change can sometimes be accounted for only by the caprices of fashion, a fickle but potent agency, to whose charge can be laid many a freak of development in large American cities.

At all events, we know only too well the rows of city dwellings whose original occupants, those for whom they were built, have long since forsaken them for other quarters more fashionable or more to their taste. These dwellings have apparently seen their best days; dilapidation and dinginess have set their impress upon their fronts, and within they have become tenements for families or individuals of a type not contemplated when they were erected, and for whose accommodation they are not in any wise fitted. It may be they have fallen into the rank of cheap, shabby boarding houses; have become, perhaps, the quarters of nondescript organizations, charitable or otherwise; or here and there they have yielded a basement or part of a ground floor to petty tradesmen with ephemeral businesses. In any case, the fact remains that these properties are not really profitable possessions from the owners' point of view. Although they may have an appreciable value, that value



Garden Facade; House at 180 East 75th Street, New York



The Main Entrance



A Dining Room

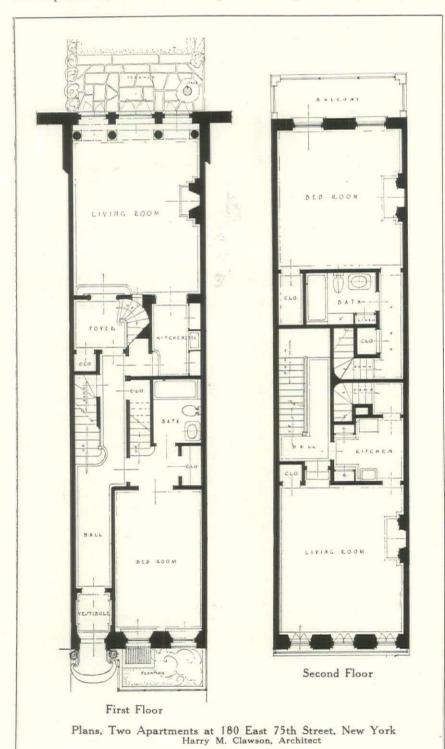
is not as substantial as it should be, and not as substantial as it would be, could they and the neighborhoods of which they are the individual units be classed in a more desirable category. Neither are they as good an asset as they might be to the municipality, for their assessed values do not keep pace with the assessed values of properties in a more attractive environment. Furthermore, their value is likely to grow relatively less all the time, unless the process of decay be arrested and some active agency of redemption be brought to bear. They are waste and unprofitable, so far as the compact and complex

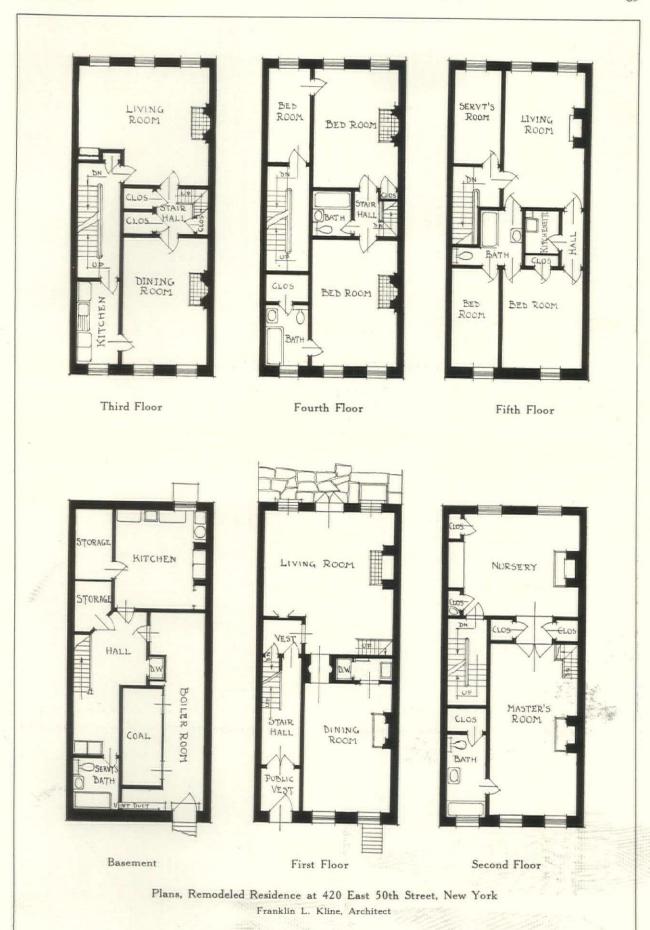
economic organization of the community is concerned, and will remain so, or become worse, until rehabilitation takes place and lifts them out of the mire. In every large city such localities exist.

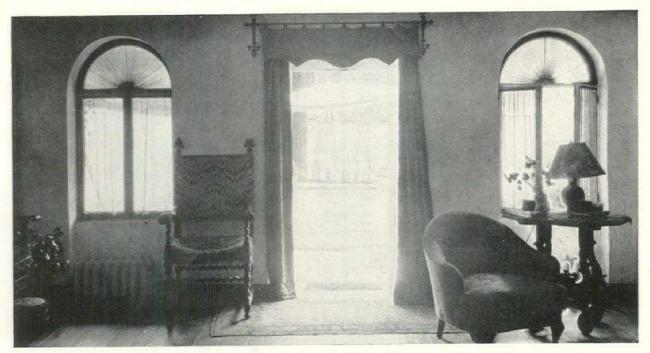
Now and again the objection is seriously made, by folk with a *laissez faire*, fatalistic turn of mind, that a wrong is done the present denizens of decaying neighborhoods by dispossessing them of the quarters they are rapidly turning into slums and by reclaiming the places for decent habitation in accord with the changed social and economic conditions of the present time. If such folly requires an answer,

it may be pointed out that it is always praiseworthy and of the very essence of progress to make any existing material conditions better than one finds them,-to make two blades of grass grow, so to speak, where only one grew before. No one, surely, will argue that such examples of neighborhood rehabilitation as "Sutton Place" or "Turtle Bay" are to be regretted. It needs no vivid imagination to picture what Sutton Place and Turtle Bay would be by the present time if the decay that had already set in had not been arrested and a course of thorough regeneration inaugurated; nor does it require profound financial acumen to estimate what property there would have been worth now either to the owners or as a source of tax revenue to the city. Yet, if the fatalistic fallacy had prevailed, Sutton Place and Turtle Bay would have been allowed to go steadily down hill. It is no kindness to relinquish a neighborhood to tenants who are causing it to deteriorate. It is simply a stupid blunder. Tenants who are misfits and really not comfortable in their quarters, which are not fitted to their mode of life, are infinitely better off elsewhere, even though they may have no "model slums" to repair to. Perhaps some day we may arrive at the achievement of truly model slums. At any rate, it is doing them a genuine service to prevent them from creating new and larger slums.

There is an unfortunate tendency inherent in most







Living Room, First Floor Apartment, 420 East 50th Street, New York

towns and cities built by people of Anglo-Saxon blood, a tendency to sprawl and straggle, leaving behind the outlying districts areas imperfectly developed that soon begin to decay. This tendency is traceable to certain traits of Anglo-Saxon character. The remedy is to be found in a subsequent process of consolidation. The problem of systematic con-

solidation of urban "waste areas" is one that nearly every city, sooner or later, is obliged to face. In New York the problem happens to be particularly acute, owing to the dense population of the city and the physical constriction of its limits. As one method of coping with this problem, the remodeling of old houses into new apartments has evidenced success.



Living Room, Apartment in House at 420 East 50th Street, New York



Dining Room, Apartment in House at 420 East 50th Street, New York

## THE BUILDING SITUATION

#### A MONTHLY REVIEW OF COSTS AND CONDITIONS

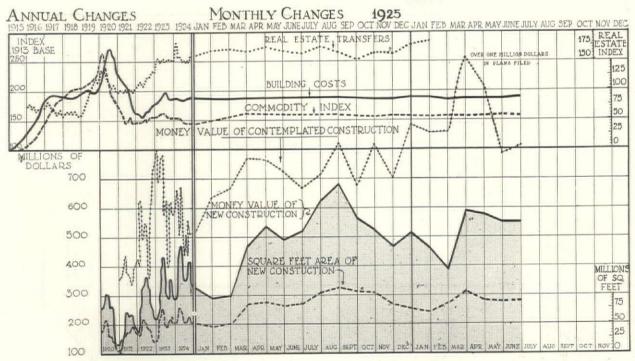
HE month of June, showing well maintained building activity, closes a six months' period which again establishes a high record for any similiar period of building industry in the United States. According to figures of the F. W. Dodge Corporation and other authorities, it is evident that the round figure total of new building for the first six months of 1926 is approximately three and a half billion dollars, being about 15 per cent greater than for the first six months of 1925. The month of June records for the country new building construction amounting to approximately the sum of \$948,000,000.

While there has been considerable talk of the slowing up of building activity, it is quite evident that there is no very definite slowing up in evidence. On the other hand, it is obvious that the present pace cannot be maintained indefinitely, because there must be a limit to the capacity of building labor in this country, and as costs are increasing again because of this situation, it is probable that many wise prospective investors will defer their projects. It will be a good thing for the industry if this occurs, and a more general distribution of building activity over the

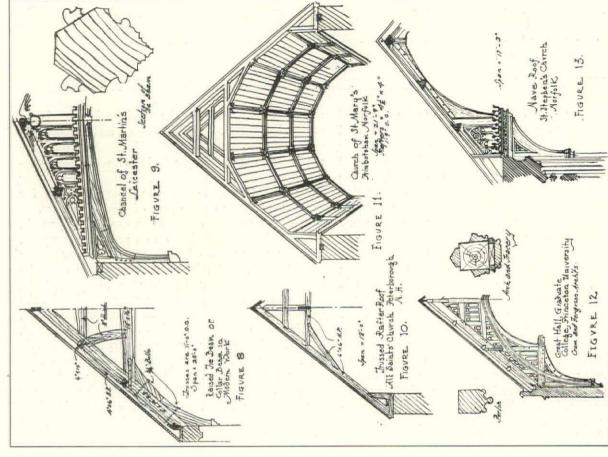
next few months will aid materially in relieving a strained situation, both as to labor and the production and distribution of materials. Architects are advised that it probably will be wise to defer projects for two or three months, unless the local labor and material situation is elastic enough to allow for favorable bidding on the part of the contractors.

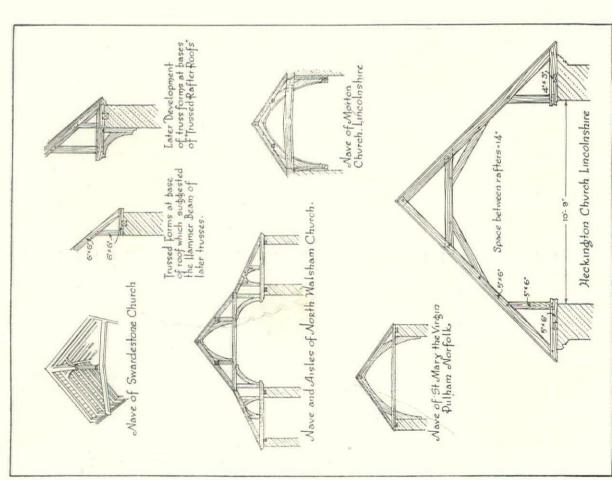
The contemplated construction during the first six months of 1926 is the highest on record in any year, and for the month of June totaled approximately \$807,000,000, which is 16 per cent above even the vast amount represented in the month of June, 1925.

The attitude of investors in mortgage bonds, the proceeds of which are used to finance new buildings, continues on a sound basis of interest, and with other funds used for mortgage purposes, it is evident that the financing progress continues on as strong a basis as ever. The mortgage companies are constantly ready to handle new projects and are not curtailing funds, although the economic viewpoint is being more carefully studied than ever, and financing is not available for over-built districts or for projects not effectively designed and well planned.



THESE various important factors of change in the building situation are recorded in the chart given here: (1) Building Costs. This includes the cost of labor and materials; the index point is a composite of all available reports in basic materials and labor costs under national averages. (2) Commodity Index. Index figure determined by the United States Department of Labor. (3) Money Value of Contemplated Construction. Value of building for which plans have been filed based on reports of the United States Chamber of Commerce, F. W. Dodge Corp., and Engineering News-Record. (4) Money Value of New Construction. Total valuation of all contracts actually let. The dollar scale is at the left of the chart in millions. (5) Square Foot Area of New Construction. The measured volume of new buildings. The square foot measure is at the right of the chart. The variation of distances between the value and volume lines represents a square foot cost which is determined, first by the trend of building costs, and second, by the quality of construction.





OLD ENGLISH OPEN TIMBER ROOFS OF DIFFERENT TYPES

#### The Designing of Open Timber Roofs

By E. T. P. WALKER

A S we look over the achievements of church architecture in recent years it seems that of all its various departments the study of open timber roofs, as revealed to us in the beautiful examples of mediæval architecture, has received the scantiest attention. Many of our churches of the twentieth century are excellent in general design, in mass and in detail; many have beautiful proportions of nave and choir, exquisitely designed sanctuaries and entrance portals, but how very few have beautiful, honestly constructed roofs! It may be that most of the other parts of a church present inviting possibilities to the artist and craftsman, whereas the problem of spanning a roof has been very largely left to the solution of the engineer.

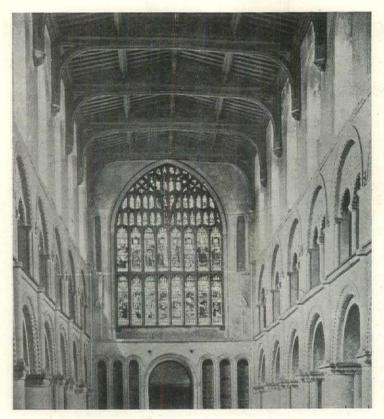
From a purely architectural point of view it is poor practice in a building of any character to construct a thing in steel or concrete and then attempt to deceive the beholder by covering it with a wood casing. This method of designing may deceive, but it does not convince. On close study such woodwork is found to lack all of the qualities which contribute so much real, innate charm and beauty to the old woodwork of English and continental churches,the variety of chamfers, the life-giving qualities of the surfaces of plain faces and mouldings, the checks and sincerity of the graining, and the depth of the material. Another point that may be touched upon in this connection is the appropriateness of design for the problem at hand. When steel is used the properties of the steel alone are considered, and often the wood forms, if really solid, would fail utterly to do the work which they pretend to do. And we find in such work many examples where, if wood alone had been used, the design of the framing would have been entirely different. It is safe to conclude that had such been the case the problem would have been studied with due regard to the properties of the materials, and the results would have been immeasurably finer and more architectural.

The need of a close study of early roofs is very manifest when we realize how excellent these models are and how fully they answer our own requirements in matters of construction. It is not for us to slavishly imitate, but it is for us to study the examples still left to us with an idea of mastering the principles of their inherent qualities of law and order, whether they have to do with exterior embellishment or inner construction. The sacred edifice is and should be the assembling place for the best in all the various arts. As we study the mediæval churches we find that no art has made more notable achievements than that of building the roof; there is no portion of a building, ecclesiastical or secular, requiring more skill in its construction and more thought in the designing of its ornament.

Mankind was in an early stage of barbarism when the necessity of having some place of shelter was first experienced. The origin of covered habitations is lost in the twilight of history. The earliest forms of shelter must have been rude indeed. When the hollows of trees and the recesses of caverns failed him, it is probable that the savage devised nothing better than he could construct from the boughs of trees covered with skins, or moss and twigs, or mud and clay. These earliest forms were steps in historical development and are exceedingly interesting in that, crude as they were, they furnished ideas which led to later results of great architectural importance.

The simplest and earliest type of roof was that formed by two rafters pitching against each other. It soon became apparent, however, that this type of construction was defective because the rafters had a tendency to spread and thrust outward the walls on which they rested. This led to the use of the tiebeam, which has been used in all periods and which is still the best of all constructions when the roof is hidden from view. It may be observed that the tiebeam roof was never entirely discarded by mediæval builders. The trussed-rafter or single-framed roof, the roof framed with hammer-beams and braces, and the roof constructed with collars and braces all followed in the later development. But we find constantly recurring in the Norman, Early English Decorated and Perpendicular periods the use of the simple tie-beam form. In its earliest examples the tie-beam was sometimes used independently of the other roof members, being laid across the walls and anchored to the wall plates. Examples of this may be seen in the Church of St. Mary the Virgin, Wigenhall, Norfolk, and in the south chapel of Bredon Church, Worcestershire. Later examples show various expedients arrived at by the builder to make this simple form an ornamental feature in the design. At Southfleet Church, in Kent, the tie-beams are beautifully moulded; in the chancel of Northfleet Church the tie-beams are left in their natural hand-hewn surfaces, while the roof above is beautified with trussed rafters, panels and moulded ribs with bosses. Such a form posseses great possibilities.

The design of the tie-beam roof was changed in succeeding periods so as to harmonize with the rest of the architecture. In roofs of low pitch the beam frequently carried the weight of the whole roof, as in the case of that of the large south aisle of St. Martin's Church, in Leicester. A similar roof is that of the south chapel at St. Nicholas' Church at Kiddington, Oxfordshire. Here there is a massive beam well moulded on the soffit and connected with the wall pieces by moulded curved braces; the purlins rest directly on the beam, and the ridge is also supported on it by a strut or king-post and strengthened



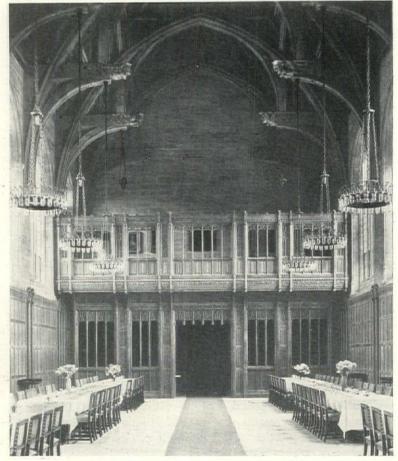
A Beautiful Though Comparatively Simple Open Timber Roof

by short curved braces. The church at Higham Ferrars, Northamptonshire, is of the Decorated period. The tiebeam is cambered and with the short curved braces forms an arch. cornice and rafters are simply but effectively moulded. In roofs of higher pitch the arch shape is retained in connection with the tie-beam. In the nave of Morton Church, Lincolnshire, the beam and the arch are equally emphasized, and on this account the result is lacking in beauty and order. In many tie-beam roofs the arch form was entirely omitted, as in Swardestone Church, in Norfolk. The design includes a boldly cambered beam supporting a small king post with cap and base and curved braces springing to the principals and ridge. This is an interesting example of use of a simple form, one well adapted to the problem.

The roofs over North Walsham Church in Norfolk are beautiful examples of the tie-beam construction without any surface ornament. The beauty of this work is the result of a very scientific and correct use of timbers. It shows ingenious framing, but nothing of a superficial character. The ties of the aisle roofs pass through the

walls and form corbels for the wall braces which, in turn, support the tie-beams over the nave. The Chapel of St. Anne at Arlington Heights, Mass., and the chapel at Greenlawn Cemetery, Nahant, Mass., both designed by Cram & Ferguson, are good examples of modern work done in the true spirit of Gothic architecture.

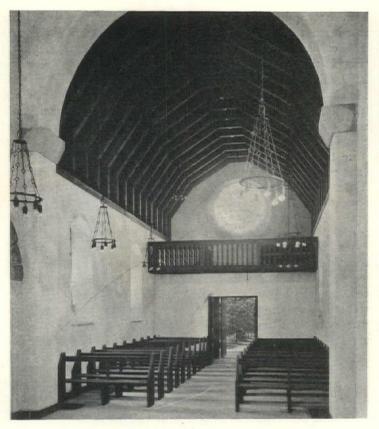
As we trace the development of the roof framing through the ages we find that the roof with diagonal ties follows closely upon the tie-beam form of construction. It was more widely used and was sometimes substituted for earlier forms when discovery had been made of its superiority of construction and of the additional height and opening of the roof space which it made possible. In roofs of wide spans each pair of rafters had a collar which was stiffened by braces. Sometimes the braces occur above the collar, and at other times they are tenoned into the rafters and soffit of the collar. The nave roof of Ely Cathedral furnishes a good example of this method. Here we find each pair of rafters trussed so that from below it is a richly wooded roof suggesting in its long parallel curves the form of an arched ceiling. The church at Peterborough, N. H., by Cram & Ferguson, pre-



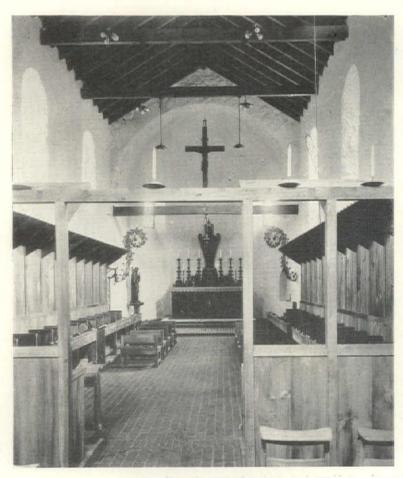
Open Timber Roofing; Graduate College, Princeton Cram & Ferguson, Architects

sents a noteworthy example of this type of construction in modern work. In this instance the constructive forms have been carried out just as in work of this kind in the middle ages; the timbers are solid throughout, mortised, tenoned and halved together and held securely by oak pins.

In roofs of this character the rafters usually extended over the outside edges of the walls to form the roof cornices on the exteriors of the buildings. Because the walls were thick and finished horizontally at the lines of the plates, great openings were left on the interiors between the tops of the walls and the underneath sides of the rafters. The builders introduced a strut on a line with the inside wall to give additional support to the rafters and to more firmly secure the entire roofing system to the wall. The addition of these vertical struts above the wall gave additional value both constructively and artistically to the roof in its completeness. An additional horizontal timber resting directly on the wall and connecting the vertical strut with the rafter completed the triangle and gave to the roof on each side a firm trussed base and obviated any danger of the truss spreading at the walls. Some students regard this simple form as



Nave of Chapel at Nahant, Mass. Cram & Ferguson, Architects



Choir; St. Anne's Chapel, Arlington Heights, Mass. Cram & Ferguson, Architects

very important in the history of events, as it undoubtedly supplied the idea for the development of the hammer-beam truss, which followed later.

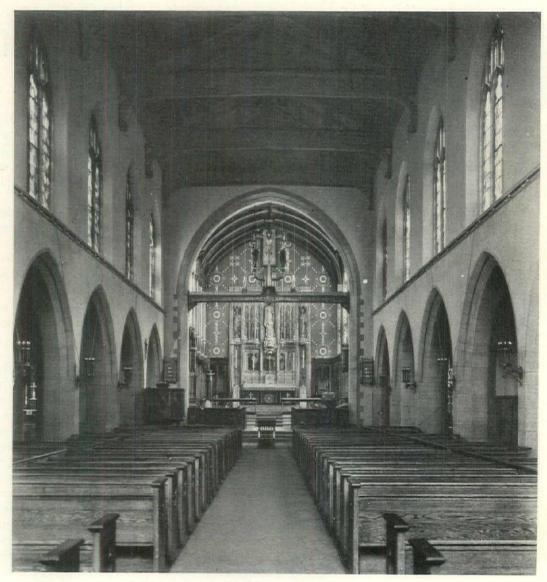
In many of the old trussed rafter roofs boarding was applied underneath the rafters, braces and collars, and formed coved or polygonal ceilings divided into panels with engaged mouldings and further enriched with carved bosses at the intersections. In some of the work the tie-beam was retained, as in the chancel of Sandridge Church near St. Albans, Herts. But in work of the Early English and Decorated periods, we find the tie-beam omitted and use of trussed rafters characteristic. The spaces between the rafters varied from 12 to 20 inches.

Some authorities have regarded the hammer-beam truss as a tie-beam truss after cutting away the central portion of the tie-beam. There is a similarity, at first thought, though it cannot but be regarded as erroneous to make this comparison, for the constructive principles of the two trusses entirely disprove such a theory. It is more logical in terms of construction, to regard the hammer-beam as a development of the trussed rafter base which has just

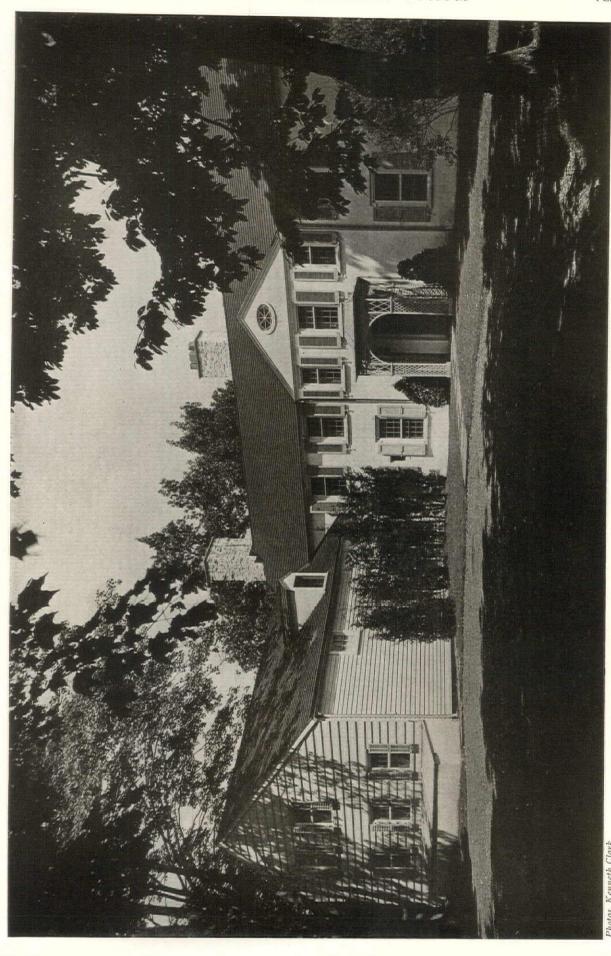
been described. We have no examples of the hammer-beam truss making use also of the tie-beam. The earliest example we know is the magnificent truss in the roof of Westminster Hall, completed in 1399. This differs from all earlier roofs in the use of large main arches of timber springing from the bottom of the wall pieces and uniting at the soffit of the collar-beams. The hammer-beams and struts run through this arch, and their braces complete the form of a trefoiled arch. This particular example is so perfect that it is hardly possible that it was the beginner of the style. The various examples which must have intervened between the times of building the earliest trussed-rafter examples and this superb truss, the culmination of the type, have been lost to us. Use of the hammer-beam trusses did not begin until late in the fourteenth and were not generally used until later in the fifteenth century. In the early examples the curved braces were usually of the same thickness as the main rafters of the truss; in the later examples they were usually 3 or 4 inches thick, and occasionally thicker.

Having once discarded the tie-beam, the English church builders, moved with the startling beauty of the latest form, carried to a perfection that has never since been attained the wooden roof in its most excellent forms. In this phase of architectural beauty England is unrivaled. Whereas the continent has examples in all the other departments of ecclesiastical architecture that far surpass the English work of the same nature, there is no work having examples of open timber ceilings that can equal those of almost any county in England. The very best example in our work of today, a roof which can stand comparison with the best of English examples, is that in the dining hall of the Graduate College at Princeton University, designed by Cram & Ferguson.

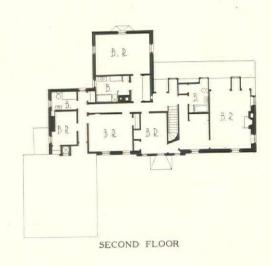
Open timber roofing is particularly useful in these days of high building costs, in that it adds architectural richness and dignity to a building for vastly less than would necessarily be paid for vaulting of any kind. Especially when color is used upon roof of open timber, there is secured an appearance of splendor satisfying out of all proportion to its cost.

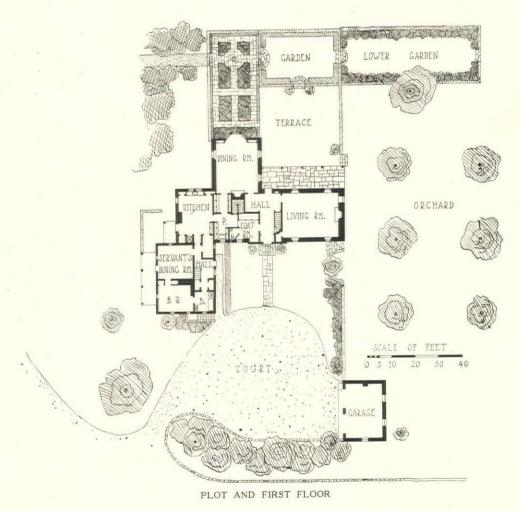


A Modern Example of Use of Open Timber Roofing



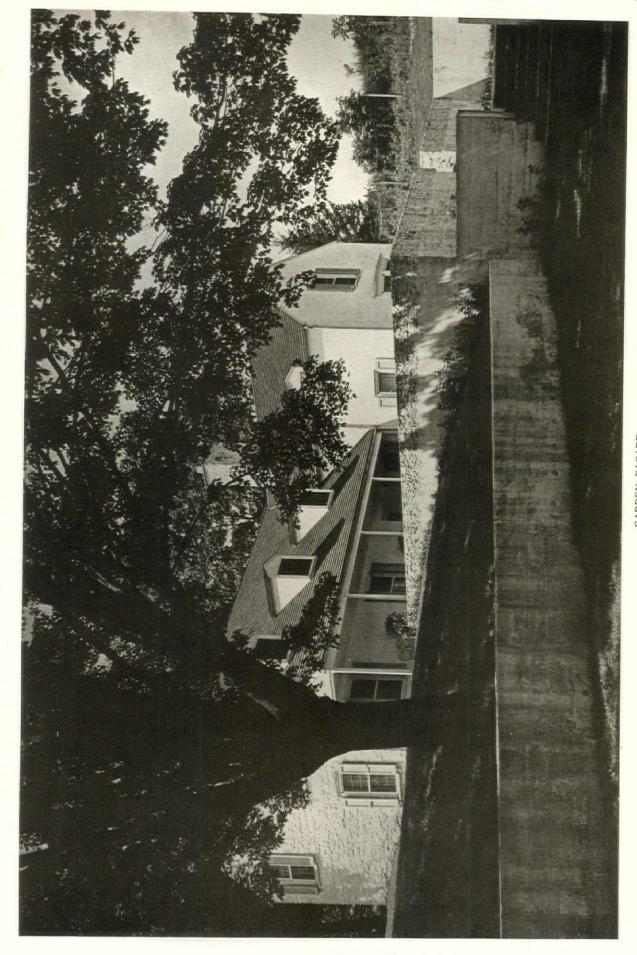
HOUSE OF MRS. A. C. BALDWIN, BEDFORD HILLS, N. Y. BUTLER & CORSE, ARCHITECTS





PLANS, HOUSE OF MRS. A. C. BALDWIN, BEDFORD HILLS, N. Y.

BUTLER & CORSE, ARCHITECTS



GARDEN FACADE
HOUSE OF MRS. A. C. BALDWIN, BEDFORD HILLS, N. Y.
BUTLER & CORSE, ARCHITECTS





THE ENTRANCE
HOUSE OF MRS. A. C. BALDWIN, BEDFORD HILLS, N. Y.
BUTLER & CORSE, ARCHITECTS





TERRACE AND GARDEN FACADE
HOUSE OF MRS. A. C. BALDWIN, BEDFORD HILLS, N. Y.
BUTLER & CORSE, ARCHITECTS





END ELEVATION FROM ORCHARD

HOUSE OF MRS. A. C. BALDWIN, BEDFORD HILLS, N. Y.

BUTLER & CORSE, ARCHITECTS





THE DINING ROOM



FIREPLACE END OF DINING ROOM
HOUSE OF MRS. A. C. BALDWIN, BEDFORD HILLS, N. Y.
BUTLER & CORSE, ARCHITECTS





OME END OF THE LIVING ROOM



A VIEW OF THE LIVING ROOM
HOUSE OF MRS. A. C. BALDWIN, BEDFORD HILLS, N. Y.
BUTLER & CORSE, ARCHITECTS





THE END ELEVATION



DETAIL, ENTRANCE FACADE
HOUSE OF MRS. A. C. BALDWIN, BEDFORD HILLS, N. Y.
BUTLER & CORSE, ARCHITECTS



# SMALL BUILDINGS

### A Theory Relating to Spanish and Italian Houses in Florida

By HOWARD MAJOR

HAVE lived in the peninsula of Florida for several years, and for the past decade have been a frequent winter visitor. I have often wished to express an opinion of the error of Florida's ways in architecture, hoping that some good may thereby be done. I suppose naturally there is another side to the question, but personally I consider the houses, and particularly the small, so-called Spanish and Italian buildings, nothing more than aberrations. These bad houses springing up everywhere are a sure indication that the American public and carpenter-builders are fumbling with a foreign element. These same people, given a small Colonial house to build in Florida, would exhibit an intelligent understanding, as is seen elsewhere throughout America. Theoretically, there are stronger reasons why the Latin masquerades should cease. Today Florida is the melting pot of the union, the cosmopolitan state. Should not a cosmopolitan public exhibit a strong nationalism? Should not the house itself be in its national style of architecture? Yet here, staid Florida citizens of the type immortalized by Sinclair Lewis,-realtors, rotarians and chamber of commerce members,-see fit to house themselves in baby pink, Alice blue and sea green houses, which they fondly believe to be of either Spanish or Moorish architecture. Curiously enough, these Babbitts consider their environment appropriate; but to me it is as incongruous as to see them dressed in the habiliments of a sheik or of Don Juan, having no relation to present conditions.

America has, everyone now knows, a fine architectural traditions, that of the colonial period and

of the early republic. It is the architecture which we are further developing today. It is our national style. One may easily go a step further, since the Colonial style was brought over from the mother country, and say that the English-speaking races have a national architecture, differing in expression in various localities, but similar. Granted, then, that we have our national style, can it be adapted to the climatic conditions of the semi-tropics? houses of eighteenth century Charleston, with verandas and balconies for each floor, are most fittingly suited for Florida's climate. The planters' homes of the early republic throughout the "cotton belt" are admirably planned for the tropical summers throughout Georgia and Alabama. These houses have balconies and verandas between or behind colossal colonnades, either in front of or complctely encircling the buildings. These well shaded second-floor balconies would furnish cool retreats for a Florida summer. In these houses the rooms are very high-studded, which, together with shaded facades, ensures cool interiors. With these two types Florida need have no other source to draw from. The public and builder should have a natural understanding of such architecture, and could produce from this precedent creditable architecture for the critic to praise as fulfilling all the requirements.

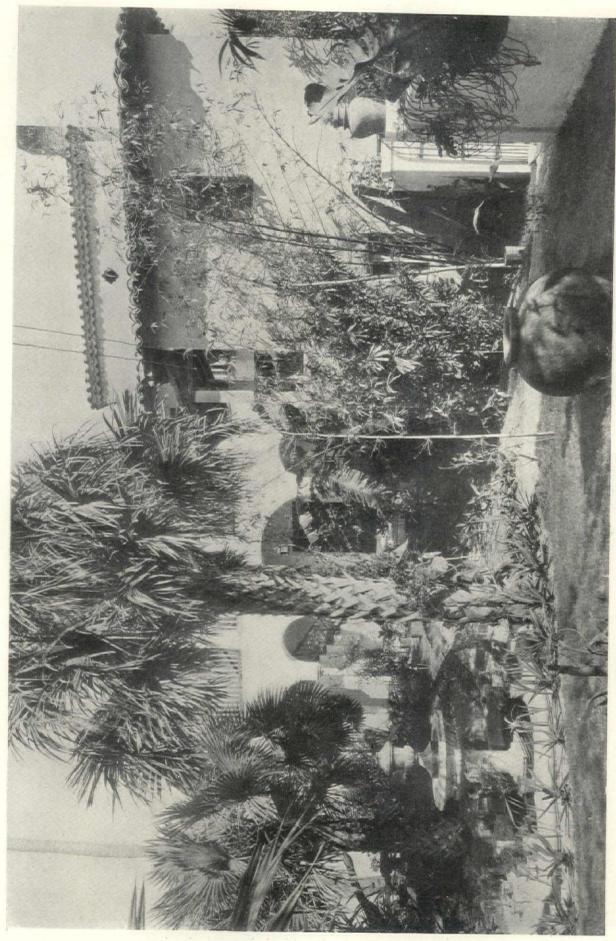
However, Florida has other sources to draw upon, that if not American, are closely related. The lovely architecture of Bermuda; of Nassau; of Trinidad; of Barbadoes and of Jamaica:—all sister colonies of America in the eighteenth century. Nassau and Bermuda are swept by the same Gulf Stream that



Thousands of examples like this Florida house illustrate the unfortunate results of adopting an architecture unsuited to the temperament of the people



LIVING ROOM, RESIDENCE OF HORACE CHASE, ESQ., PALM BEACH HORACE CHASE, ARCHITECT



GARDEN FRONT, RESIDENCE OF HORACE CHASE, ESQ., PALM BEACH HORACE CHASE, ARCHITECT



Patio, House of Marion Sims Wyeth, Esq., Palm Beach

makes Florida famous, and all have the same climatic conditions. One often hears: "Why not Span'sh architecture in Florida? The Spaniard first settled this section." So he did, and so also did he settle Bermuda, Trinidad, Nassau and Jamaica. Then the Englishman came and pushed him into the sea. But did the Englishman carry on the Spanish tradition? He did not. The English and Latin races have very different ideas. The English race craves fresh air; the Latin studiously avoids it. In a sleeper upon a Latin railroad, have you ever tried to open a window with a Latin in the upper berth? If you never have, I would advise suicide as a more pleasant experience. Just so in their homes; the Spaniard builds a house with splendid wall surfaces,-walls of extreme thickness, and with small windows,-windows that are barred with shutters through the heat of the day, so that the cool, damp air is confined indoors. The Englishman, in the tropics, builds homes fronted with or surrounded by two-story balconies, often latticed to effectively exclude the burning sun, but open to readily allow every breeze to circulate throughout the house. Similarly the American craves fresh air, which is another strong argument for the elimination of Spanish architecture in Florida. Every architect designing a house in Florida remembers the client exclaiming: "I want a Spanish house, but I want



Photos, F. E. Geisler

Loggia, Residence of Marion Sims Wyeth, Esq., Palm Beach Marion Sims Wyeth, Architect

lots of large windows and sleeping porches." Can you imagine a Spaniard using a sleeping porch? He would consider even the thought barbarous. And how can a house be Spanish in character with many and large windows? It simply can't be so designed.

All this being true, what was the motive behind this Latin movement? About ten years ago an architect from New York was called upon to do a palatial home in Miami. Here was his opportunity for a bully good time, - and he had it; but he did not for a moment consider the havoc it would play within the next decade. Then about nine years ago, another architect migrated to Palm Beach, and built a beautiful club house. In Palm Beach the winter visitors had this artistic edifice to compare with the staid old wooden facades of the "Breakers" and "Poinciana" hotels, and a few shingled "bungalows." At this time it began to be the vogue for wealthy visitors to build winter homes. They, without exception, wanted houses in the Spanish style, like this artistic club. For this wealthy class it had good points; - people who had city and country homes in the north designed in the Georgian style, but who, for their two months in Florida wanted to live in something different. One enjoys the Everglades Club costume ball for the night, but one does not want it for 365 nights in the year. Neither do I believe that this wealthy, educated class would want



Detail, Dining Room, House of Nelson Odman, Esq., Palm Beach



Photos. Mattie Edwards Hewitt

Loggia, House of Nelson Odman, Esq., Palm Beach Howard Major, Architect



Photos. F. E. Geisler
"Tap Room," House of George Dobyne, Esq., Palm Beach
Marion Sims Wyeth, Architect

to live in their Spanish stage settings 365 days in the year. However, the vogue spread like wildfire, and since it began, every house, irrespective of cost, has been built in this Latin style, so that the pathetic part of it is that the good, wholesome working man does have to live in these abortions 365 days in the year, whether he wishes to or not.

Latin architecture is far easier for the average architect to design than Colonial or Georgian architecture. Basically it is a picturesque style. In the north, if we have an English house to design, it is clearly defined that it shall be either Tudor, Renaissance or Georgian; or if Georgian, late seventeenth century, early eighteenth century, middle eighteenth century, late eighteenth century, or early nineteenth century. If in Florida a Spanish building is to be designed, it is "Spanish" and that is all. Anything from thirteenth century to early nineteenth century is included, and not infrequently in the same house. There seems to be no idea that a building's design should be confined to a period of time. This, I should say, is the paramount objection to the better Florida houses. A natural outcome of this flirting with early Renaissance forms has been the coarsening of houses with bastard ornament in lieu of the well thought out details and composition needed.

I have said that the Spanish is a simple style to design in. Of course I mean as applied to



Photos, Mattie Edwards Hewitt

House of Howard Whitney, Esq., Gulf Stream Golf Club Howard Major, Architect

eighteenth century types, for I believe this is the point where we should take up all tradition. Gothic and Renaissance are, from merely economic reasons if for no other, out of the question. First to be considered is of course the plan. The Spanish house, where its size permits, includes a patio, or room without a roof. This patio is the brilliant contribution of the Latin. The patio, being an outdoor room, should have the dimensions of a room. The mistake in the Florida house is that the patio is so large that it is a court rather than an outdoor room. It should approach a square in plan, 25 by 25 being quite sufficient, or 30 by 30 in the largest houses. It should be paved and have potted plants, and not be a garden, as it is in the prevalent Florida interpretation. It may be quite small and still be in excellent taste. Around the patio should be overhanging balconies, loggias and cloisters, for the exterior of the Spanish house is always bare and devoid of such intimacies. The small rectangular house does not allow space to include the patio. A poor substitute, which is often attempted, is completing the enclosure by means of two walls affixed to the small ell-shaped house. The Latin patio is an inside, open-air room. It is surrounded on four sides by the building. This American version of two sides building and two sides wall is a makeshift, and not really in character with its prototype.



Detail, House of George Dobyne, Esq., Palm Beach Marion Sims Wyeth, Architect



Photo. F. E. Geisler

Patio, House of Maitland Belknap, Esq., "Major Alley," Palm Beach Howard Major, Architect

After the plan is determined, simple, well proportioned roof masses are to be considered. If the house is large enough, a few picturesque breaks should occur, for the Spaniard knew how to take full advantage of picturesque roof lines. The texture of Spanish tile roofing is so lovely that with a well composed roof the problem is To complete the design, comabout solved. pose in a direct manner the windows and entrance doorways, relieved, if necessary, by balconies or grilles, and the problem is finished. Cornices are unnecessary, and should not appear in the modest dwelling. Enframed and ornamental doorways are also unnecessary in small houses. If a client's money must be squandered, do it by adapting the lovely iron grilles and balconies of the Spaniard. Another outstanding decorative feature of the Spanish dwelling is the hanging wood balcony with its tiled roof, which usually extends from 3 to 4 feet from the facade on a level with the second floor, the floor beams cantilevered through to carry it. These beams are not of the usual 2 by 12 inches but

range from 6 by 8 to 6 by 10 inches, and are often shaped and carved, but in a simple manner. They terminate carrying a turned railing between chamfered uprights, spaced 7 to 8 feet apart, which, in turn, support corbels, upon which rests the roofing.

Too much cannot be said of the charm and interest of the patio. The exterior of the Latin building is cold and forbidding, but a glimpse through the half-open doors, through the house into the patio, usually shows a lovely garden room of flowers, glazed tiling and fountains. The sense of absolute privacy out of doors, under the tropical blue sky is perhaps its most charming feature. The transformation from bare, austere masonry exteriors to the intimate details of inviting loggias and balconies comes as an unfailing delight. The desire is universal to have just such a patio, and in the climate of Florida it is justifiable. If Colonial or British West Indian architecture is to supplant the Latin, then we must introduce the patio into it, which is easy to accomplish and entirely appropriate and consistent, and therefore wholly desirable.

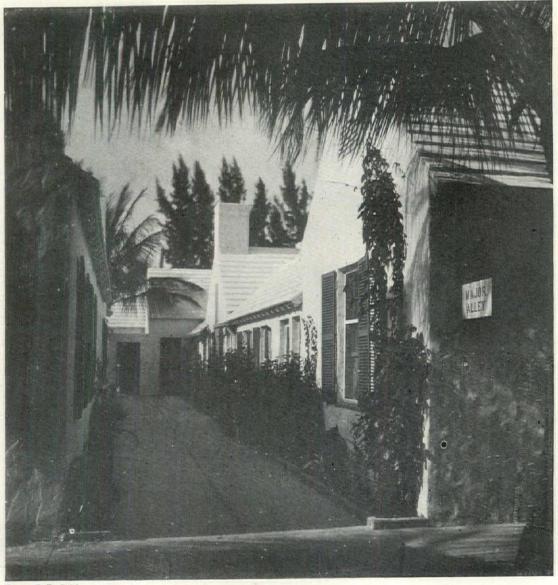


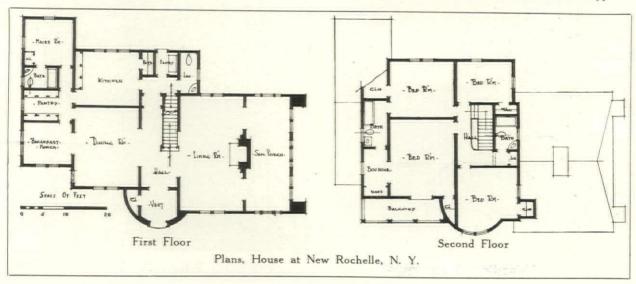
Photo. F. E. Geisler
Small Houses in "Major Alley," Palm Beach, Illustrating Use of "British West Indian" Architecture
Howard Major, Architect



A HOUSE AT NEW ROCHELLE, N. Y. D. A. SUMMO, ARCHITECT

THE much-discussed question as to the appropriateness of the use of Spanish and Italian architectural styles for houses located in the New England and middle states will not be taken up in considering this group of small houses which follow in design what is often termed today "Mediterranean" architecture. There are rugged picturesqueness and consistency in scale which commend the design of this house in New Rochelle to favorable attention. Heavy red tile roof, rough-finished stucco, crude wood window shutters and heavily

framed overhanging balcony give this house a character strongly suggesting the farmhouses of northern Italy. Another pleasing variation from the usual small house is in the irregularity of the plan. This to a certain extent is suggested in the elevations. In the semi-circular bay or half tower on the first floor is located an entrance vestibule leading into a center stair hall. A living room and sun porch occupy the low one-story wing at the right of the front door. A dining room and kitchen, together with a breakfast porch, pantry, maid's room and bath occupy the



## FORUM SPECIFICATION AND DATA SHEET—128 House at New Rochelle, N. Y.; D. A. Summo, Architect

### OUTLINE SPECIFICATIONS

EXTERIOR MATERIALS:

Stucco.

ROOF: Tile.

WINDOWS:

Wood.

FLOORS:

Hardwood.

HEATING: Hot water. PLUMBING:

Enameled fixtures.

ELECTRICAL EQUIPMENT:

Lighting

INTERIOR MILL WORK:

Chestnut.

COST PER SQUARE FOOT:

\$60.

DATE OF COMPLETION:

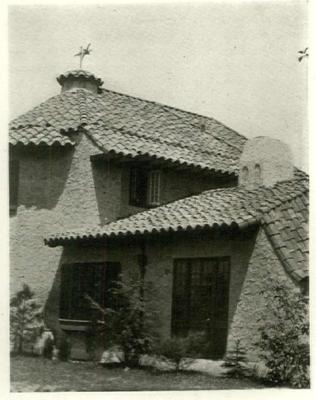
June 1, 1926.

space on the first floor at the left of the entrance. Stairs to the cellar lead down under the main stairway. A small lavatory is located at the back of this stair hall, adjacent to a rear entry, the door of which opens onto a graveled forecourt. The illustrations included here are all of the front of the house, and so do not show the rear entrance. On the second floor are four bedrooms, a boudoir and two baths, all of which come in the main part of the house, over the front hall, dining room, pantry and kitchen.

The treatments of the windows in the living room and sun porch are not particularly Italian or Spanish, but they indicate a concession to the demand of most clients today that there shall be as much light and air as possible in a country house. The extension of the main walls of the house beyond both the sun porch and the corners of the main part of the building may add an unusual touch to the design, but hardly serves any logical or consistent purpose, with the exception of the buttress-like projection on the upper corner of the second story, which gives space for a closet to the bedroom located at this corner. The use of these buttresses prevents the unbroken continuation of the wide overhanging eaves, which treatment adds much picturesque charm to many houses built in the Mediterranean style.







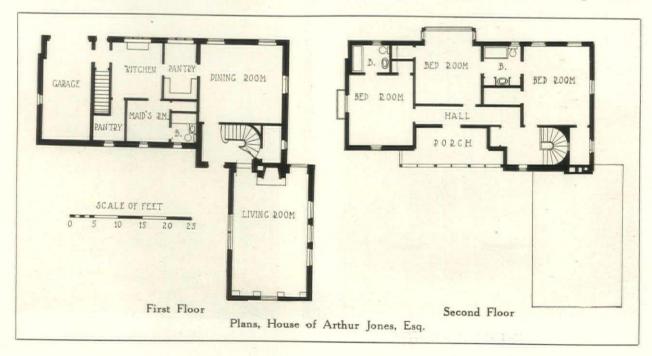
Entrance Facade



HOUSE OF ARTHUR JONES, ESQ., GLENCOE, ILL.
JAMES ROY ALLEN, ARCHITECT

IT is interesting to note the many different materials used for the exterior walls of houses designed in the Spanish and Italian styles. Except for the desire to obtain an interesting texture for the wall surfaces of buildings in these types there can hardly be said to be any precedent for the use of "skintled" brick for the walls of Italian houses. However, the result obtained is sufficiently effective to justify the use of this most modern and latest type of brickwork. In the case of this house near Chicago the general proportions, outline and design indicate sufficiently the style from which it is derived. Whether this house would seem more truly

Italian had rough-textured stucco been used for the exterior walls is open to question. The front elevation shows a carefully studied and attractive arrangement of small windows and glassed-in second-story loggia. Undoubtedly in summer, when the glass sashes are removed from this loggia, the effect of the design is still more Italian. The location of this long loggia in relation to the entrance door and the sturdy end chimney is excellent; also the sparing use of windows, as well as their small sizes, deserves commendation and consideration. It is possible that the effect of the long, low living room window, which projects slightly from the building and has



### FORUM SPECIFICATION AND DATA SHEET-129

Residence of Arthur Jones, Esq., Glencoe, Ill.; James Roy Allen, Architect

### OUTLINE SPECIFICATIONS

EXTERIOR MATERIALS:

Common brick, laid up rough ("skintled").

ROOF:

Tile.

WINDOWS:

Wood, casement.

FLOORS:

Tile in hall; wood in living room.

HEATING:

Vapor.
PLUMBING:

Enameled fixtures.

ELECTRICAL EQUIPMENT: Lighting.

INTERIOR MILL WORK:

Walnut in living room. Painted birch elsewhere.

INTERIOR DECORATIVE TREATMENT:

Painted plaster.

APPROXIMATE CUBIC FOOTAGE OF BUILD-ING: 41,000.

41,000.

COST PER CUBIC FOOT: 50 cents.

YEAR OF COMPLETION:

interesting leaded glass carried out in the Italian manner, would have been somewhat more in keeping with this style had the wide opening been divided by stone colonnettes or by brick mullions. The archedtop casement door at the end of this living room, with its wood muntins which seem rather more Colonial than Italian in character, is effectively placed as the only opening at the end of this one-story living room wing. The design has considerable charm.

In plan the house is as interesting as it is in elevation. The entrance door leads into a small hall with circular stairway, beyond which is a well proportioned square dining room. In the main part of the first floor are located the pantry, kitchen, maid's room and bath and a one-car garage which opens into the court at the rear of the house. This garage is conveniently reached through a rear entrance hall, so that in winter it is unnecessary for the owner to go outside of the building. The second floor plan shows three good sized bedrooms and two baths. The closets indicated with these bedrooms are all unusually spacious. The sleeping porch or covered loggia is well located, opening off the second floor hallway, thus making is accessible without the necessity of passing through any of the bedrooms. One bedroom possesses an attractive bay window. Unfortunately, there is no illustration showing the exterior elevation of this window, which is at the rear of the house. It seems probable that this rear elevation, with the garage doors and this overhanging bay window, must be almost as interesting architecturally as the front elevation shown here.



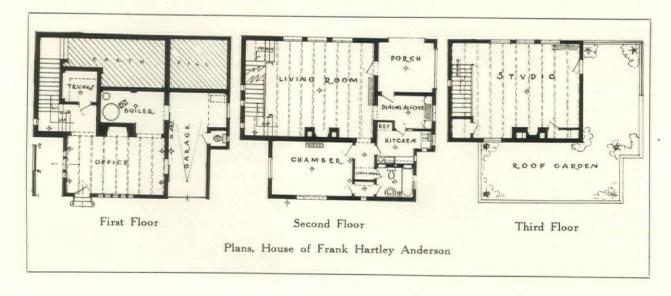




Hall and Stairway



HOUSE OF FRANK HARTLEY ANDERSON, BIRMINGHAM, ALA. FRANK HARTLEY ANDERSON, ARCHITECT



### FORUM SPECIFICATION AND DATA SHEET-130

House of Frank Hartley Anderson, Architect, Birmingham, Ala.

### **OUTLINE SPECIFICATIONS**

GENERAL CONSTRUCTION:

Reinforced concrete and hollow tile.

EXTERIOR MATERIALS:

Stucco; stone pilasters.

ROOF:

Concrete tile.

WINDOWS:

Casements throughout; cypress, leaded.

FLOORS:

Reinforced concrete; cork tile on second floor; composition on first floor.

HEATING:

Vacuum steam; fuel oil burner. Automatic gas heater for water.

PLUMBING:

Enameled iron except toilet, porcelain.

ELECTRICAL EQUIPMENT:

Lighting and electric range, dishwasher, refrigerator, mixer, etc.

INTERIOR MILL WORK:

Doors are fir; brick mouldings around doors and windows.

INTERIOR WALL FINISH:

Plaster, sand-floated and painted.

INTERIOR DECORATIVE TREATMENT:

Rough oak beams and ceiling in three rooms, stained silver gray.

APPROXIMATE CUBIC FOOTAGE OF BUILD-ING:

30,000.

COST PER CUBIC FOOT:

51 cents.

DATE OF COMPLETION: February 6, 1924.

NOW a man by the books he reads and the K friends he keeps" is no more true than "know an architect by the house he designs for himself." In Birmingham, Frank Hartley Anderson has recently completed his own house, which although small is of unusual interest and distinction. He has taken an irregular shaped, hillside lot and built a house to fit the unusual and difficult topography. From the lower street, on which the house really faces, it rises in two simple masses, one lower than the other, to a crowning cornice and overhanging roof of Spanish tile. It is the simplicity of these two adjoining rectangular buildings, with their rough-textured stucco and few but well placed and fanciful window and door openings, which wins this house one's commendation. The elevation of the lower part of the front facade terminates with an interesting roof garden above the second story, an attractive treatment possible only in a mild climate seldom visited by snow or extreme cold. The design of



Office, House of Frank Hartley Anderson

this main elevation might have been slightly improved had it been possible to place the arched doorway of the garage the same distance from the corner near which it is located as is the main entrance door from the opposite corner of the building. The narrow lancet windows, of which five are grouped at the right of the entrance door, and one in the wall of the second story, give a distinctly mediæval touch to the design. It is feared that the small number and sizes of the window openings would hardly suit the type of client usually encountered by the architect of today. The general public has not as yet been educated up to an appreciation of the beauty of the plain wall surfaces of "Mediterranean" buildings.

With such an interesting and unusual exterior, it is not surprising to find the plan of the interior equally out of the ordinary. The first or ground floor of the building contains a good sized office, which connects by a fireproof door with the garage at one side, and through an open archway with a boiler room at the rear. Off of this office a wood stairway leads up to the second or main floor into a large living room on the south side of the building. Off this room opens a corner porch and a dining alcove connecting with a small kitchen. At the back of the living room, directly above the office and garage, is a well proportioned bedroom with bathroom and closets connecting. The third floor of the main part of the house is devoted entirely to a studio of large dimensions, which opens by casement doors onto the roof garden. Practical and convenient as the plan of this house may be for a married architect or artist without children, some rearrangement would be required to adapt the plan for the use of a family with children. But the evidence of individuality and personal taste shown both in the interior as well as the exterior design justifies its unusual plan.



Above, Entrance Facade; Below, Garden Front

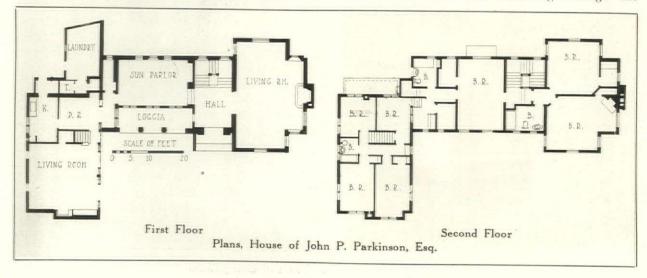


HOUSE OF JOHN P. PARKINSON, ESQ., SANTA MONICA, CALIF.
JOHN P. AND DONALD B. PARKINSON, ARCHITECTS

AGAIN we have a house designed by architects, two, father and son, and for their own occupancy. It is always interesting to note what sort of a house an architect builds for himself, as the ideas and preferences of clients greatly influence and handicap an architect in designing their houses. When building for himself, he has an opportunity of trying architectural effects and experiments in colors, plan and design, which he is seldom able to attempt in the house of a client. This Italian house at Santa

Monica has real distinction and dignity, and it is only regretted that lack of space prevents the publication of more illustrations of this excellent example of domestic architecture. The tall triple arches of the entrance loggia pleasantly dominate the front elevation, and adequately light the large center sun parlor. In general the design of the house suggests those of many of the smaller Tuscan villas, with their dominating central buildings and projecting wings.

The center stair hall, extending through the



### FORUM SPECIFICATION AND DATA SHEET—131 House of John P. Parkinson, Architect, Santa Monica, Calif.

### **OUTLINE SPECIFICATIONS**

GENERAL CONSTRUCTION:

Reinforced concrete foundation, hollow tile bearing walls, wooden floor and roof construction.

EXTERIOR MATERIALS:

Stucco.

ROOF:

Clay tile.

HEATING:

Gas hot air furnace and fireplace.

PLUMBING

Standard bathrooms; water softening system; circulating hot water system.

ELECTRICAL EQUIPMENT:

Lighting and stove, water heater, washing machine, auxiliary electric pumps for domestic water system.

INTERIOR MILL WORK:

Oak and redwood for stained surfaces. Douglas fir and pine for those painted.

INTERIOR WALL FINISH:

Stained redwood and paint, on smooth plaster.

DECORATIVE TREATMENT:

Subdued in color.

APPROXIMATE CUBIC FOOTAGE OF BUILD-ING:

75,000.

house, is entered through the main door located at the right of the high vaulted loggia. On the right of this stair hall is a living room, 30 by 19 feet, with a large fireplace in the long wall. On the opposite side of the main hall three steps lead down into a sun parlor, which occupies the center of the main part of the house. Beyond this room a doorway connects with the eastern wing, which is a complete house in itself, containing on the first floor, a living room, dining room, kitchen and laundry. Above

these rooms are four bedrooms and a large bathroom. Over the main part of the house and the western wing are three large bedrooms and one bath. From the illustration of the rear elevation of the house some idea may be obtained of the beauty of its high location. The Pacific Ocean lies a half mile distant to the southwest, while on the other side, beyond a canyon, or ravine as it would be called in the east, are the Santa Monica Mountains, which stretch for 50 miles along the coast to the northwest.



Entrance Hall, Stairway and Part of Living Room



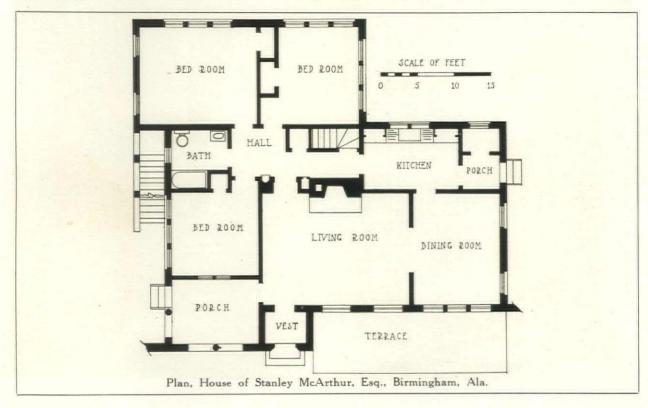
Photos, Tebbs & Knell, Inc.

HOUSE OF STANLEY McARTHUR, ESQ., BIRMINGHAM, ALA. GEORGE P. TURNER, ARCHITECT

It is always refreshing to find a new interpretation of the "Mediterranean" style, so-called, exdining rooms. The low, tile roofed entrance vestibule East, on account of the flat roof and exterior stair-

emplified in this small one-story house in Alabama. makes a pleasant break in the length of the facade, The low and simple effect of the front elevation as does also the double-arched window of the covwould suggest somewhat the architecture of the Near ered porch at the left of the vestibule, as illustrated.

The plan indicates that the house is, perhaps, way leading to it, were it not for the double-hung larger than would be imagined from the front eleva-



### FORUM SPECIFICATION AND DATA SHEET—132 House of Stanley McArthur, Esq., Birmingham, Ala.

#### **OUTLINE SPECIFICATIONS**

GENERAL CONSTRUCTION:

Concrete foundation and footings. Concrete and hollow tile walls. Wood floors.

EXTERIOR MATERIALS:

Stucco.

ROOF:

Built-up roofing and roofing tile.

WINDOWS:

White pine, double-hung and casements.

PLUMBING:

Enameled fixtures.

ELECTRICAL EQUIPMENT:
Flexible conduit wiring for lighting.

INTERIOR MILLWORK: Yellow pine.

INTERIOR WALL FINISH:

Sand-finished and sponge-finished plaster.

INTERIOR DECORATIVE TREATMENT:
Painted walls. Beamed ceiling in living room.

APPROXIMATE CUBIC FOOTAGE: 27,248.

COST PER CUBIC FOOT: 35 cents.

DATE OF COMPLETION: September, 1925.

tion. Three bedrooms and a bathroom are grouped at the side and rear of the living room, accessible to it but sufficiently isolated to secure adequate privacy. The kitchen is small and opens directly into the dining room, a convenient location for a young housekeeper, so many of whom prefer to do their own work rather than struggle with the servant problem. The bedrooms are so located that each has spacious windows on two sides, a very desirable arrangement for a one-story house with a flat roof. If sufficient air space is left between the flat roof and

the ceilings of the rooms below, there should be no difficulty in keeping cool in summer. The view of the dining room, shown here, indicates that no attempt at creating Spanish or Italian atmosphere in the furnishing and decorating of this house has been made. All of the furniture as shown appears to be excellent reproductions in mahogany of the late Colonial type, which attractively furnishes any small modern dining room, though in this case it gives no suggestion of the architectural style from which the design of the exterior of the house has been derived.



The Dining Room



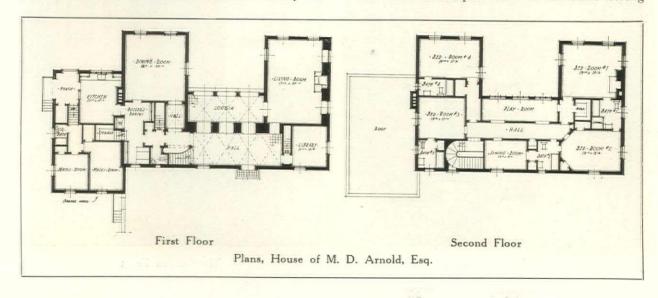
Photos. Tebbs & Knell, Inc.

HOUSE OF M. D. ARNOLD, ESQ., KNOXVILLE, TENN.
BARBER & McMURRAY, ARCHITECTS

HERE is a house decidedly homelike and attractive in design, which suggests in general outline and proportions the small villas around Florence. The entrance door in its architectural detail also suggests Italian precedent, but the spacious, double-hung windows, each with its 24 small panes and wood muntins, could have been derived from no architectural type but the Colonial. However, the effect of this combination of Italy and New England is decidedly homelike and pleasing. The location of the rain water leaders as well as of the single irongrilled window on the front elevation indicates the care and thought which went into the study of this problem and which achieved such satisfactory re-

sults. This house is a noteworthy proof of the now generally admitted fact that absolute adherence to any one architectural style is not necessary in order to secure a thoroughly architectural and pleasing design. As the house stands on sloping ground, it was possible to drop the level of the service wing considerably below that of the main structure. This difference in height is further emphasized by the high tiled roof of the main house and the low, flatroofed service wing. Under this wing, on a level considerably below that of the entrance court, is located a large garage, well concealed, as is the servants' yard also, by a high stucco-covered wall.

The front door opens into an attractive oblong



### FORUM SPECIFICATION AND DATA SHEET-133

House of M. D. Arnold, Knoxville, Tenn.; Barber & McMurray, Architects

### OUTLINE SPECIFICATIONS

GENERAL CONSTRUCTION:
Hollow tile walls; wood floors.

EXTERIOR MATERIALS: Stucco walls; tile roof.

ROOF: Tile.

WINDOWS:

Double-hung, cypress.

FLOORS:

Oak and 8 x 8 tiles.

HEATING: Vapor.

PLUMBING:

Enameled fixtures.

ELECTRICAL EQUIPMENT: Lighting.

INTERIOR MILL WORK:

Birch, oak and pine.
INTERIOR WALL FINISH:

Sand-finished plaster.

DECORATIVE TREATMENT:

Paint.

APPROXIMATE CUBIC FOOTAGE OF BUILD-ING: 90,000.

COST PER CUBIC FOOT:

45 cents.

DATE OF COMPLETION: January, 1924.

hall, out of which a vaulted loggia is reached through three arched openings. Thus, when one enters the main hall from the forecourt, a delightful vista is obtained of this typical Italian loggia with its terraced garden beyond. The living room, of excellent proportions, opens off of this loggia on the right, while on the left is the dining room with connecting pantry. The maids' rooms and bath, as well as the kitchen and service porch, located in the second floor of the

service wing, are only one step below the main floor level. For a country house of moderate size this plan is recommended for careful study and emulation. The second floor is equally well arranged, with four large master bedrooms and four baths and a sewing room, all directly accessible from the main hall. Particular attention is called to the excellent location and plan at the end of the main hall. The enclosed stairway treatment is distinctly Italian.



The Hallway



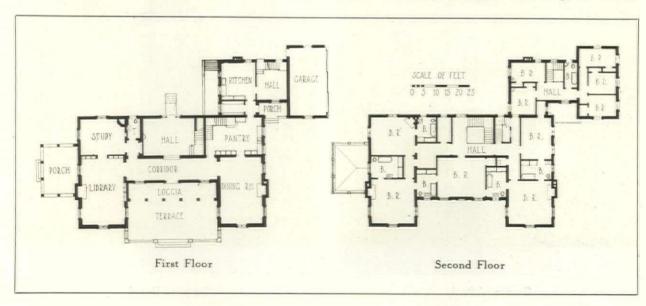
The Garden Front



HOUSE OF HENRY E. BASKERVILL, ARCHITECT, RICHMOND, VA.

GAIN we have to consider an architect's house or Spanish architecture. There is, however, a pleas-

A designed by himself. This house is rather more ing straightforwardness and simplicity in the design pretentious in size, detail and interior finish than of this comfortable, homelike looking house, which some already considered in this group of houses, all decidedly expresses a spirit of culture and refineof which suggest at least some influence of Italian ment. An entrance loggia containing five arches



### FORUM SPECIFICATION AND DATA SHEET-134

House of Henry E. Baskervill, Architect, Richmond, Va.

### **OUTLINE SPECIFICATIONS**

GENERAL CONSTRUCTION:

Brick walls; fireproof first floor and wood floor joists above first floor.

EXTERIOR MATERIALS:

Stucco on brick, with limestone trimmings.

FLOORS:

Oak and teak parquet in first floor rooms; brown tile in halls, and pine in bedrooms.

PLUMBING:

Enameled fixtures.

ELECTRICAL EQUIPMENT:

Wired in conduit.

INTERIOR MILL WORK:

Mahogany in dining room; gum in balance of first floor and second floor halls. White woodwork; mahogany doors in bedrooms.

INTERIOR WALL FINISH:

Paneling and plaster.

DECORATIVE TREATMENT:

Marble stair with iron handrail.

APPROXIMATE CUBIC FOOTAGE: 157,000.

COST PER CUBIC FOOT:

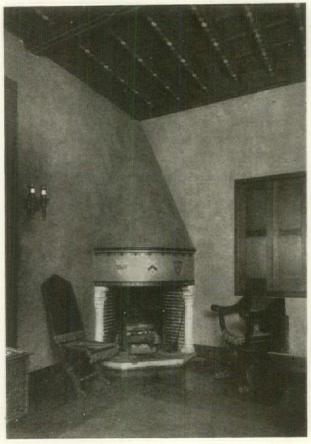
34 cents.

YEAR OF COMPLETION:

1914.

opens into the long vaulted corridor which connects the library at one end of the house with the dining room at the other. These spacious and well proportioned rooms are equal in size. Back of the dining room an unusually large pantry leads to the kitchen and service department at the rear. Joining the kitchen wing is a garage for three cars. Back of the library is a small study, an illustration of which is included in this presentation. The decorated beam ceiling, the rough plastered walls and the quaint corner fireplace with its quarter-conical hood are Italian features worthy of note. At the side of the

library a large, brick-paved, covered porch adds comfort and convenience. To the plan of the second floor of his house, Mr. Baskervill also devoted much care and study. Bathrooms separate the bedrooms, and are arranged with doorways in such a manner that access to them may be had throughout the entire group of five bedrooms without the necessity of entering the open stair hall or north and south passageways. A more logical, convenient or pleasing bedroom floor plan can hardly be imagined. It is most truly an architect's plan, showing as it does unusual economy of space and remarkable balance in design.



Corner of Study



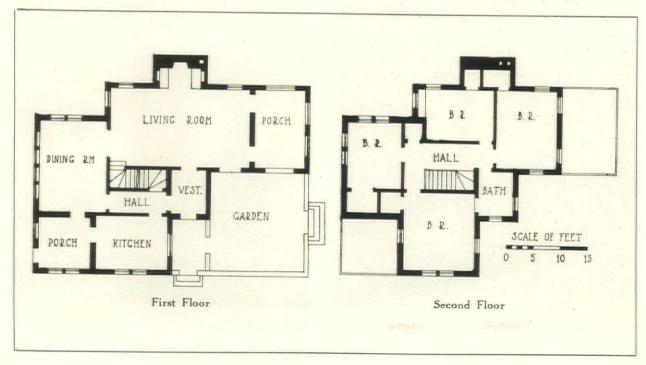
Entrance Detail



HOUSE OF KEY FOSTER, ESQ., BIRMINGHAM, ALA. GEORGE P. TURNER, ARCHITECT

NE of the houses recently completed at Hollywood, near Birmingham, Ala. from the designs of George P. Turner, architect, is this two-story, stucco-covered house which shows much originality in its design. It might be preferred that the two groups of double windows had been of equal size and, together with the single window under the gable of the roof, treated with metal casements and old glass suggesting Italian precedent, but it must be confessed that the design and location of the

house are sufficiently out of the ordinary to warrant its consideration as an interesting example of small house architecture. The setting of the house against a background of pines is most effective and in itself justifies the unusual facade and wall treatment of the front elevation. These walls seem to end rather abruptly, and it is to be hoped that when this house is purchased and occupied they may be carried back into the forest. As is so often the case with houses built on speculation, there were not sufficient funds



### FORUM SPECIFICATION AND DATA SHEET-135

House of Key Foster, Esq., Birmingham, Ala.

### **OUTLINE SPECIFICATIONS**

GENERAL TYPE OF CONSTRUCTION:

Concrete foundation and footings. Concrete and hollow tile walls. Wood floors.

EXTERIOR MATERIALS:

Stucco.

ROOF:

Built-up roofing and roofing tile.

WINDOWS:

Pine, 12-light, double-hung and casements.

PLUMBING:

Enameled fixtures.

ELECTRICAL EQUIPMENT: Flexible conduit wiring.

INTERIOR MILLWORK:

Yellow pine.

INTERIOR WALL FINISH:

Sand-finished and sponge-finished plaster.

INTERIOR DECORATIVE TREATMENT:

Painted walls.

APPROXIMATE CUBIC FOOTAGE: 39.055.

COST PER CUBIC FOOT:

38 cents.

DATE OF COMPLETION:

October, 1925.

available to carry out logically and consistently many of the architectural and decorative details which make or mar a design. Small details are important.

As the illustration of the exterior of this house indicates, the plan is irregular and amusing. The windows shown on the front elevation open into the kitchen and upon the dining room porch. The surprising lack of kitchen closets and any pantry indicated on the accompanying sketch plan has undoubtedly been rectified by the prospective owner. This omission may not be a mistake, since no two housekeepers have the same ideas about the locations of kitchen pantries, closets, sinks and dressers.

The dining room in this house probably has a charming outlook into the pine grove at the side and rear, this being true also of the living room and living porch, both of which are located at the back of the house. The high wall at the right of the entrance door encloses a square, formal garden. The location of the entrance drive and garage so necessary to a suburban house is not shown, but, undoubtedly, would be considered by an architect who could devise so clever a plan as this. The plan of the second floor shows four well arranged bedrooms and one bath. The latter opens not only off the hall but also off the principal and largest of the four bedrooms.





Interiors, Residence of Key Foster, Esq.

## INTERIOR ARCHITECTURE

# The Dining Room at Compiegne By C. HAMILTON PRESTON

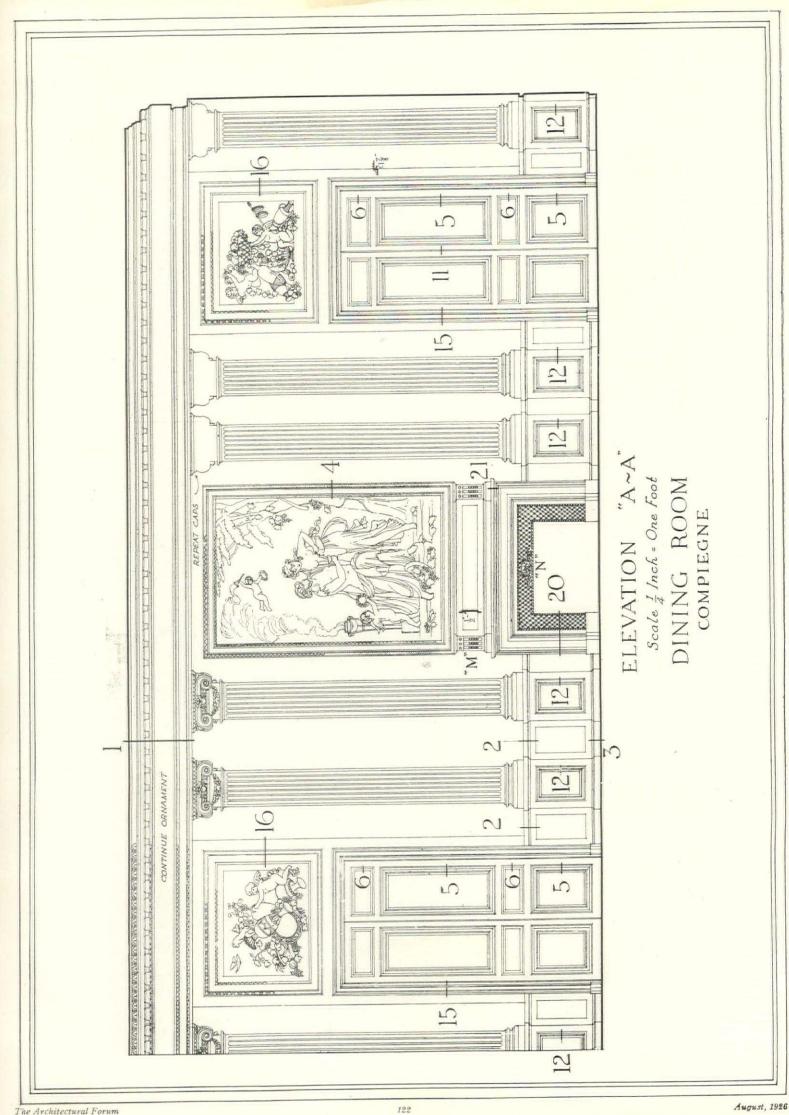
F all the rooms in the Louis XVI wing at Compiegne, the dining room is by far the most notable. Opening directly into the suite occupied by Marie Antoinette herself, it far excels in dignity and majesty any of the rooms of the royal suite. One doesn't have to look far for the reason for this. In the first place, the proportions of the room are majestic. It is approximately 45 feet long by 33 feet wide and 19 feet, 8 inches high, proportions which make it adequate for those state functions for which it was designed. Then, too, whereas the other rooms are in some instances ornate and burdened with detail as well as with stuffs and furniture, the dining room is extremely simple and direct in treatment, in fact almost severe, and yet the effect is satisfying to an unusual degree.

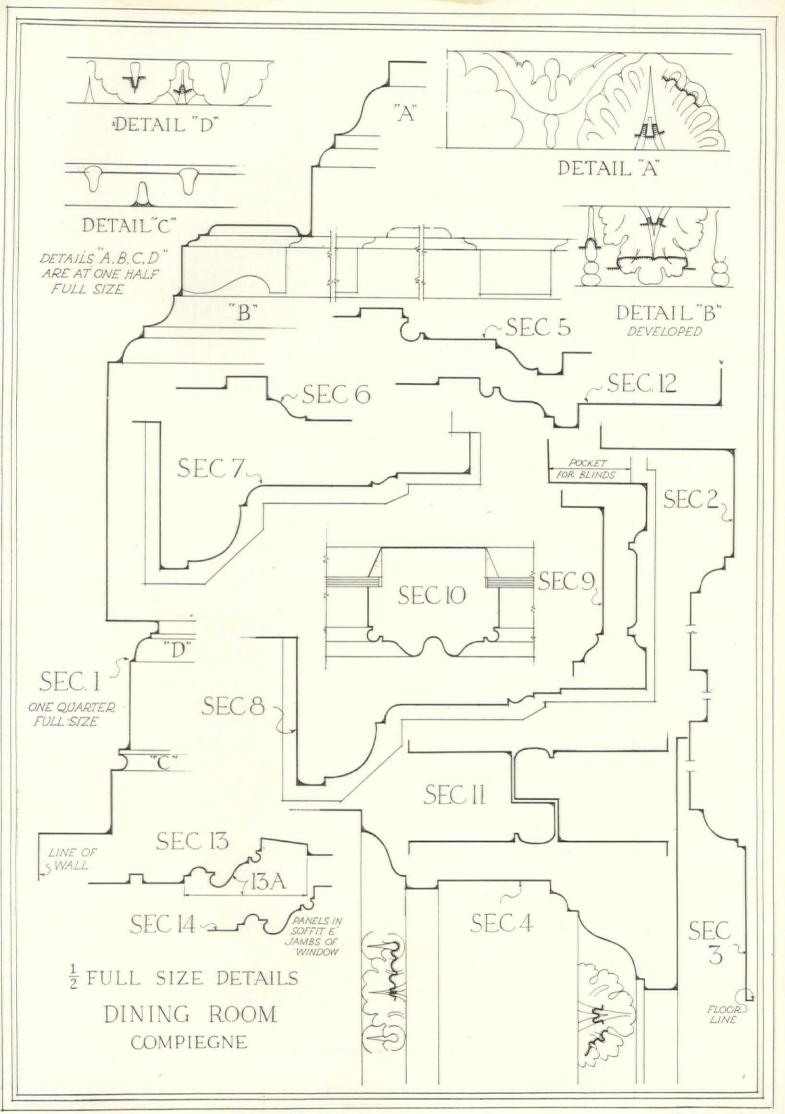
The walls are kept decidedly plain, only a faint gray marbleizing being apparent; panels are held in abeyance except for the grisailles over the doors, the huge grisaille over the mantel, and the small panels in the wainscot below the pilasters. The pilasters are very vigorous, and the caps unusually beautiful

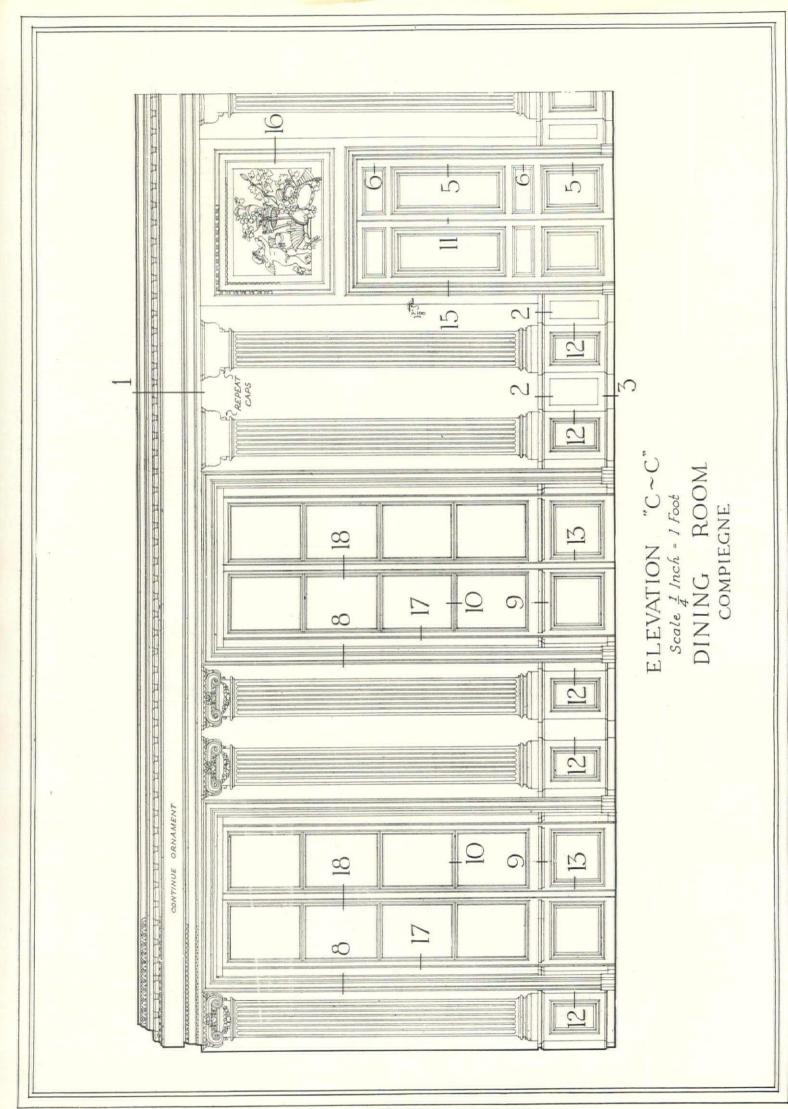
in detail. The spacing of the pilasters on either side of the mantel is unequal, but one scarcely notices it; this was made necessary by the position of the chimneypiece. The corners, cut off at an angle of 45 degrees at the far end of the room, add to the attractiveness of the plan. All the architraves are large in scale, and the mantel itself as well; but so large is the room, and the various members are so well proportioned that there is no perceptible heaviness of scale. The cornice, simple yet bold and vigorous and beautifully disposed as regards detail, is dignified and well designed and adapted to the splendid order of pilasters. The entire room is richly simple, reticent, and full of character.

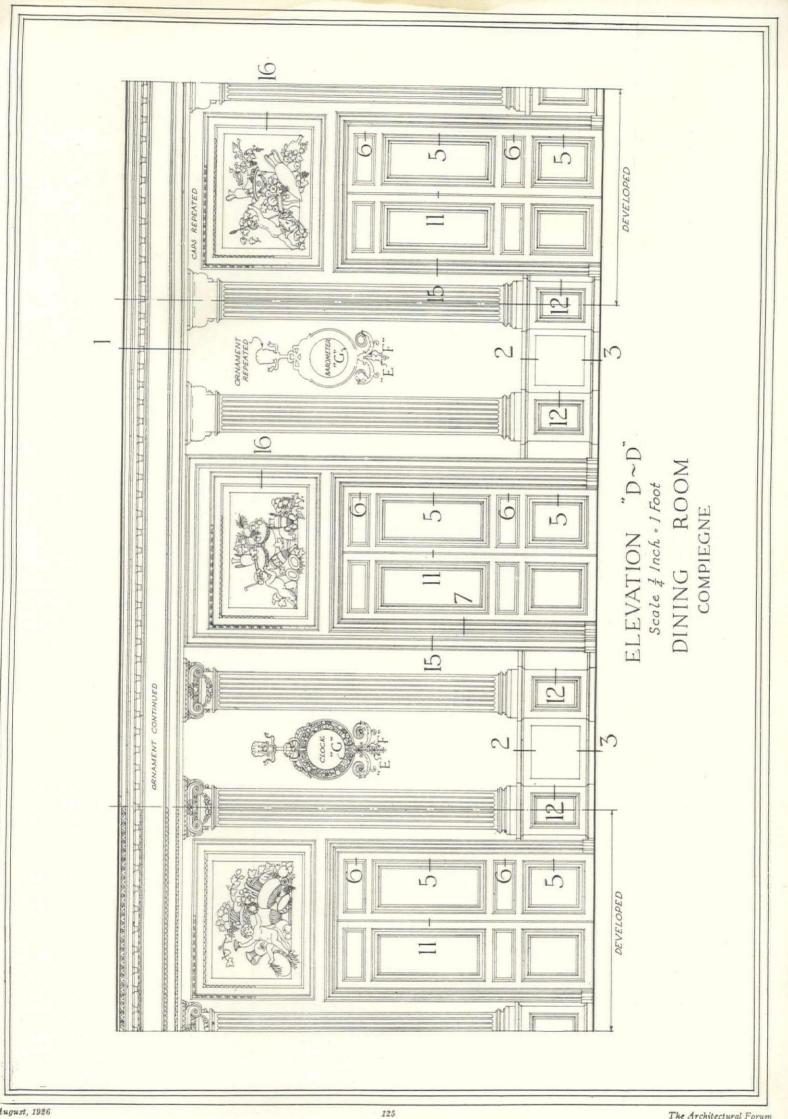
The marked simplicity of the room, its great size and noble treatment all combine to make it one of the most commanding and impressive to be found. As an inspiration for rooms of a like character today it cannot be surpassed. It is an excellent example of what can be done in the case of a large room by exercising restraint in the matter of ornamentation and detail. This is always desirable in a dining room.

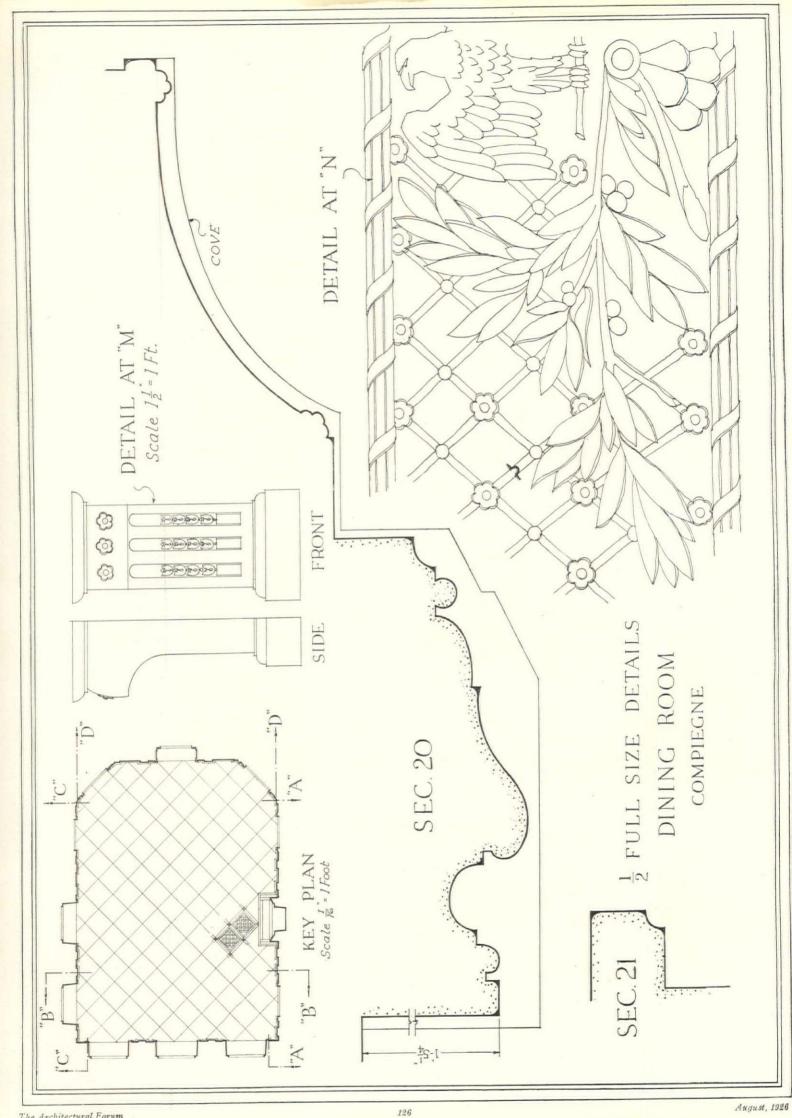


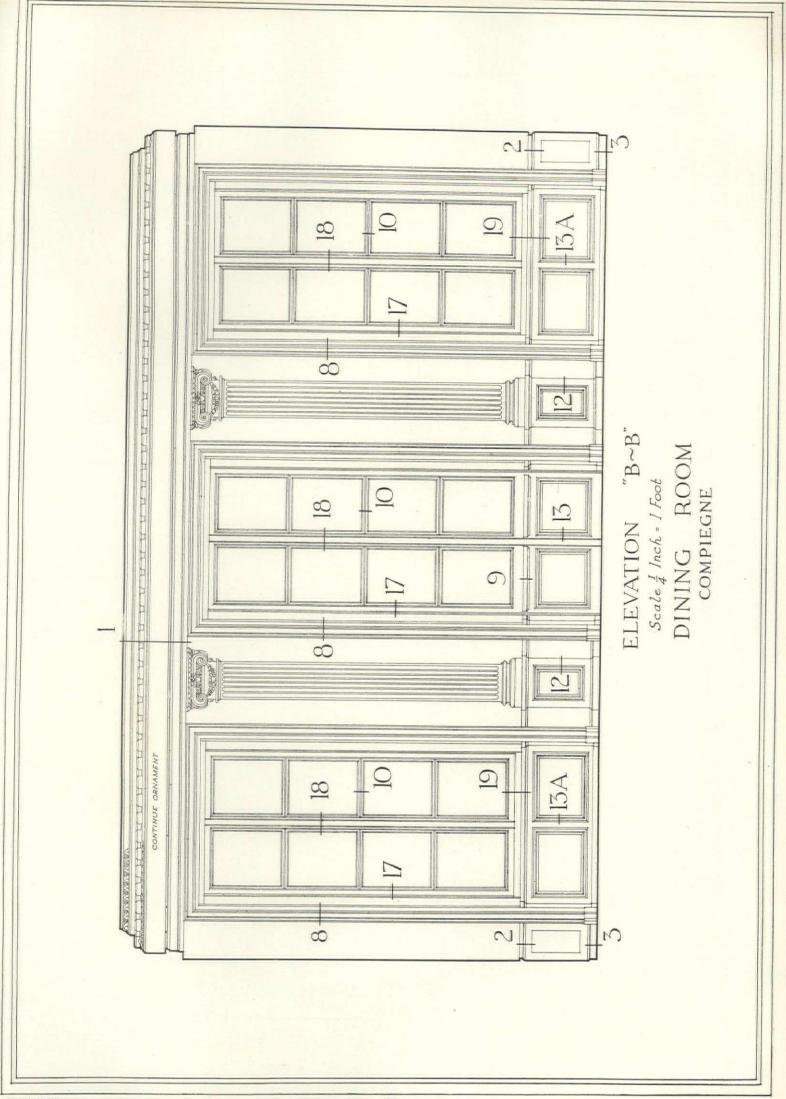


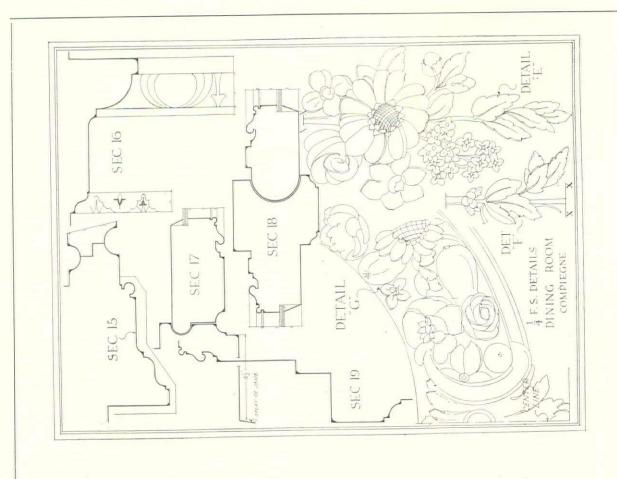


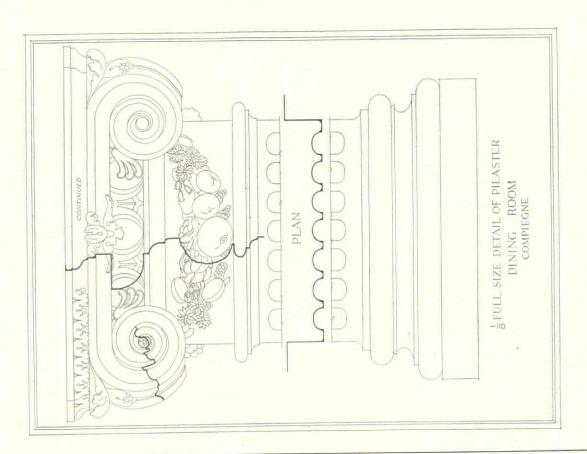






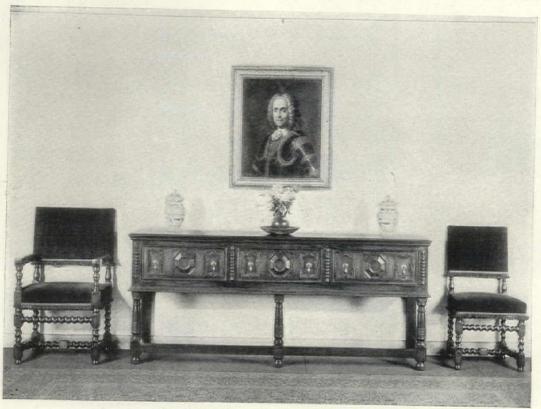






## KENSINGTON FURNITURE

AWARDED GOLD MEDAL OF HONOR IN NATIVE INDUSTRIAL ART 39TH ANNUAL EXHIBITION ARCHITECTURAL LEAGUE OF NEW YORK



17th Century English Oak Dresser, by Kensington

No other piece of furniture seems so to typify the hospitality of Old England as the oak dresser. Long and low, it provided an ample and convenient service board for the refreshment of the squire's guests. Around it were enacted the homely and familiar, as well as the convivial, scenes of healthy English country life.

To-day in living hall or dining room it brings the atmosphere of hospitality and simple living that is so essential to the successful country home.

Kensington reproductions of such furniture are not only authentic in every detail of design but also retain, through the old-time hand processes of the Kensington craftsmen, the character and the decorative quality of old work.

Kensington Furniture is made in all the decorative styles appropriate for American homes.

Architects interested in completing the interiors they design with furnishings harmonious in both character and quality are cordially invited to avail themselves of the service of the Kensington Showrooms and staff.

Illustrated Booklet F sent on require

WORK SHOPS 605 TO 611 EAST 132ND STREET



NEW YORK

SHOWROOMS 41 WEST 45TH STREET 6TH FLOOR



Residence of M. E. Greenebaum, Jr., Glencoe, Ill. Walnut room designed and executed by Homer Studios, Chicago

# Notice the light tone of this Walnut Paneling

on paneling.

See below.

THIS walnut room in a country home shows how walnut paneling may be kept light in tone when desired. The wood in this case was finished in its natural color.

Here is further proof of walnut's amazing versatility. For many uses, walnut in darker finish may be pre-

ferred. Yet where this effect is not desired, walnut may be kept light as this illustration shows.

Whatever finish is used, walnut will always appeal because of its unfading beauty and endless variety of pattern. No other wood is so practicable for use in woodwork and furniture for the home and public building. It requires practically no care; finger-marks do not show

write for on it and it is amazingly resisting to the marks of everyday wear.

Age only increases its beauty.

For paneling and woodwork, as well as for furniture, walnut is gaining new admirers every day. It is the most adaptable of woods and none responds so satisfactorily to

artistic treatment, and to good workmanship.

Our new book, "American Walnut for Interior Woodwork and Paneling," should be in your reference file. It gives authoritative information on paneling and on the costs of walnut as compared with other woods. Write for a copy today. For convenience, fill in and mail coupon.

Fill in, clip and mail

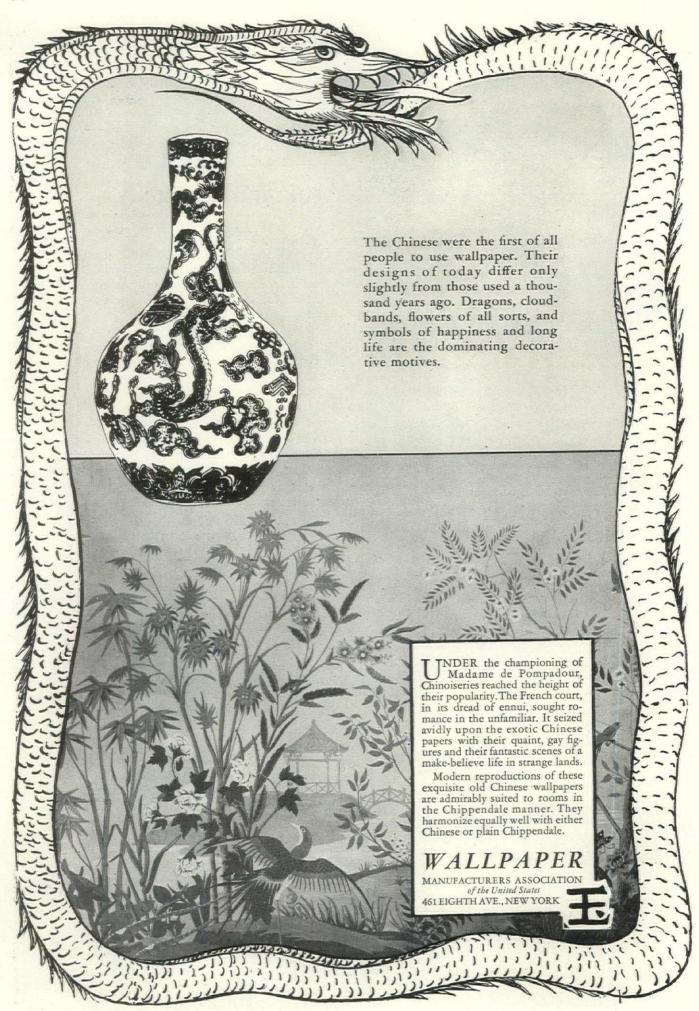


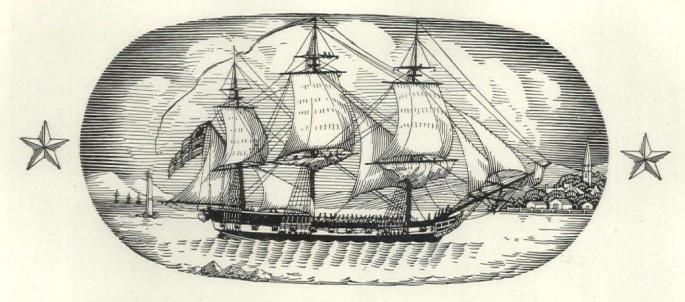
AMERICAN WALNUT MANUFACTURERS' ASSOCIATION Room 1000, 616 South Michigan Ave., Chicago.

Please send

"American Walnut for Interior Woodwork and Paneling."







### PATTERNED AFTER THE WALLPAPER OF AN OLD

## NEW ENGLAND SEAPORT HOUSE

This chintz has the quiet charm of things old

PERCHED high upon a rocky cliff over the safe, well-known harbor of Marblehead in Massachusetts Bay, an old house stands, beaten silver gray by the winds and fog and salt air.

There dwelt in days gone by, seafaring men of the stern Godfearing sort who made New England's sturdy history.

Our new interest in the early days of this, the oldest part of our country, has completely disproved our long-held theory that theirs was a rigorous existence barren of all beauty.

ROM so seemingly prosaic a source as the wallpaper in the parlour of this old Marblehead farmhouse came the design for the quaint glazed chintz shown here.

All its old-fashioned charm has been preserved, not only in the pattern but also in the colorings in

The Easy Chair, so favored by our forefathers, gains added interest when upholstered with this old-fashioned chintz



which it may be had—dull green or blue or buff or mauve or salmon.

With the interesting and charming interiors planned today along the lines of 17th and 18th Century America, this chintz is delightful.

It may be used on an old wing chair, as suggested in the illustration. Or for draperies, for window shades, for slip covers.

Many other delightful chintzes, both domestic and imported, are included in Schumacher fabrics, in addition to their distinguished line of prints, damasks, velvets and brocades—all of the greatest interest to decorators, upholsterers, and the decorating service of department stores.

"Your Home and the Interior Decorator"

NOT all the people who could afford to consult a decorator do so, through failure to understand the

functions of such a service and through an impression that it is unduly expensive.

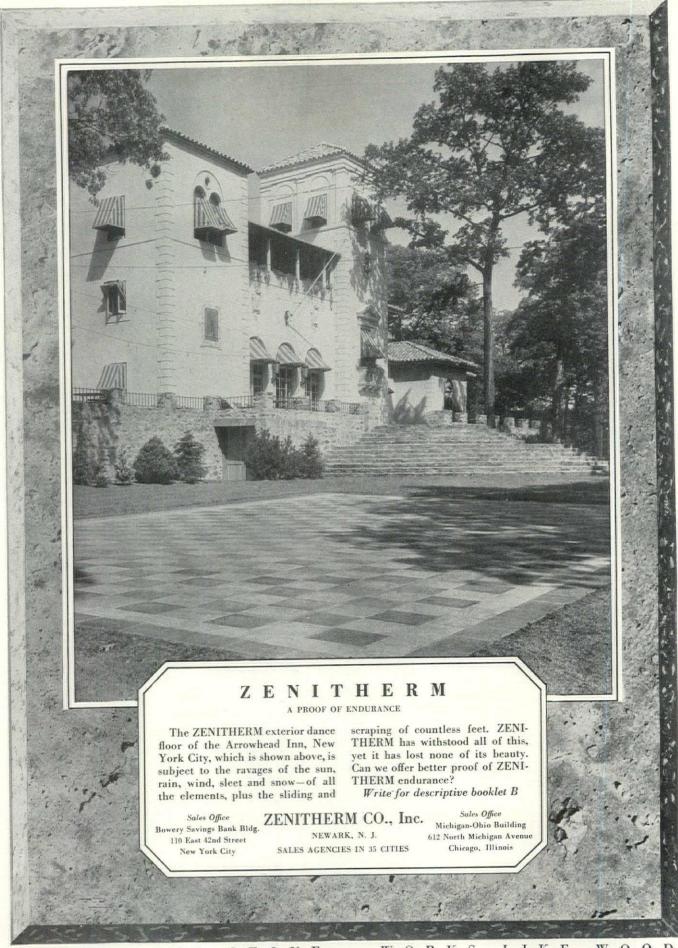
To set forth the advantages of professional advice in furnishing problems and to show how inexpensively it may be had, we have prepared the booklet, "Your Home and the Interior Decorator."

Beautifully illustrated in color, this book is being mailed to decorators, upholsterers and the decorating service of department stores. If you have not received a copy, please write us. And let us explain our special offer whereby you may send this book to your prospective clients. F. Schumacher & Co., Dept. J-8, 60 West 40th Street, New York, Importers, Manufacturers and Distributors to the trade only, of Decorative Drapery and Upholstery Fabrics. Offices also in Boston, Chicago, Philadelphia, Los Angeles and Paris.

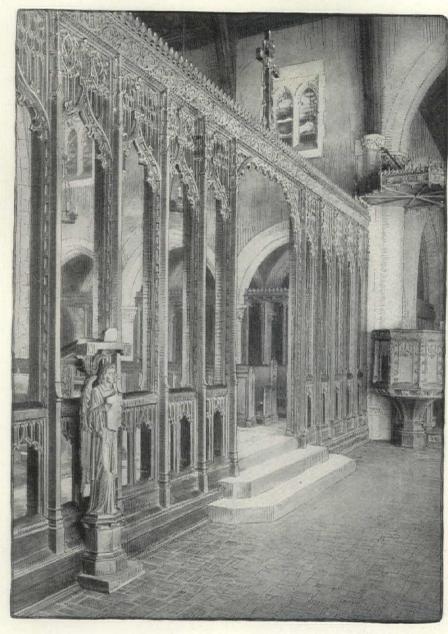


Reminiscent of old ship models, quaintly prim horsehair furniture and bits of ornament brought from far-away ports, this chintz is most delightful

F-SCHUMACHER & CO.



LOOKS LIKE STONE - WORKS LIKE WOOD



Sketch of Chancel, All Saints Episcopal Church, Pasadena, Cal., Johnson, Kaufmann, & Coate, Architects

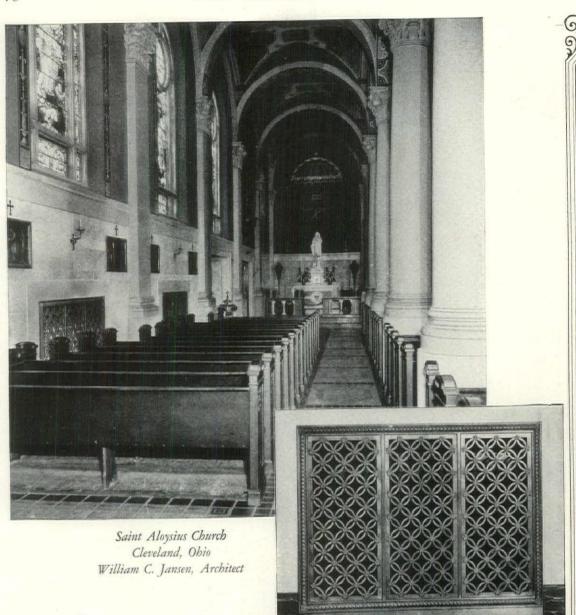
Rood Screen,
Pulpit, Lectern
and seating by
American
Seating Company

ESIGNS by Architects were here brought into satisfying reality by our carvers of artistic concepts and training, supported by experienced cabinet workers and modern equipment. Specimens of wood carving from our Studios are shown in our brochure "Ars Ecclesiastica" which will be sent upon request to architects or others who may be interested.

## American Seating Company

NEW YORK 620—119 W. 40th St. General Offices 1094 Lytton Bldg. CHICAGO

BOSTON 79 Canal Street



HE Ferrocraft Grilles used in Saint Aloysius Church, Cleveland, Ohio, were cast from the design of the architect.

It is a fitting tribute to the skill of Tuttle & Bailey Craftsmen to have been commissioned to produce these grilles.

Many of America's foremost buildings contain Ferrocraft Grilles. Correspondence is solicited from interested architects regarding either our special designs or their own detail.

### TUTTLE & BAILEY MFG Co.

441 LEXINGTON AVENUE, NEW YORK SINCE 1846
Grilles, Registers and Radiator Cabinets

# FERROCRAFT GRILLES CAST



# Two blades of Grass

How easily a cheery, airy bed chamber is made from the big comfortable living room, when all one has to do is—open a standard door leading to a closet, swing out on its fixed arc a full sized luxurious Murphy In-a-Dor Bed and, aided by its special spring balance, lower it to solid rest upon the floor.

Just as Murphy In-a-Dor Beds

changed the economics of residential hotels and apartments they are now affecting dwelling house conditions.

One result is a higher standard of living—two big rooms on the area of one. It cuts, for the accommodations given, the costs of building, maintaining and heating either apartment building or home. It reduces the work

of housekeeping. It doubles the utility of space.

Murphy In-a-Dor Bed turns sun porches into delightful open air sleeping quarters. They enable one room to be play place for the children by day and sleeping room by night.

The concealment of a Murphy In-a-Dor Bed in a closet does not interfere with the use of the closet. The bed is independent of the door, hence never throws the door out of plumb. Murphy In-a-Dor Beds are made in a variety of styles. There is one that harmonizes with the other furniture.

Excellence of construction makes the beds last as long as a building lasts—and the beds need no re-adjustment after being installed. Beauty marks the beds. The Graceline tubing is smooth, seamless, perfectly finished. Springs are the famous "Slumber King"—built for sleep.

Architects, builders, owners—call upon Murphy Co-operative Service in planning apartment or dwelling. Write for descriptive literature. Address, please our office nearest you.





## The Murphy In-a-Dor Bed

MURPHY DOOR BED COMPANY

New York City 19 W. 44th St.
Chicago, Ill. 22 W. Monroe St.
Adlanta, Ga. 33 Luckie St.
Seattle, Wash. Terminal Sales Bldg.
San Francisco, Calif. Crocker Bldg.
San Francisco, Calif. 1807 S. Main St.
Denver, Colo. 1807 S. Main St.
Denver, Colo. 1834 Blake St.
St. Fetersburg, Fla. 234 Columbia Bldg.
St. Louis, Mo. 315 N- 10th St.
St. Louis, Mo. 315 N- 10th St.

Detroit, Mich. 7th Floor, Kresge Bldgr
Birmingham, Ala. 513 N. 21st St.
Cleveland, O. 1140-42 Hanna Bldg.
Kansas City, Mo.
Dallas, Tex. 1114 Grand Ave.
Dallas, Tex. 1919 Pacific Ave.
Houston, Tex.
Houston, Tex.
New Orleans, La. 319 Dryades St.
Ottawa, Canada 266 O'Conor St.
Montreal .698 St. Catherine St., West



Window, Middle Century treatment, by the Payne Studios. The grouping of the figures, traditional treatment of line, and the faithful adherence to color and pattern of light and dark, repeat in a striking way the charm of the old windows of this period.

Our designers will either prepare sketches for your approval before making the cartoons, or will develop your own designs under your direction. We cooperate intelligently with architects to their entire satisfaction.

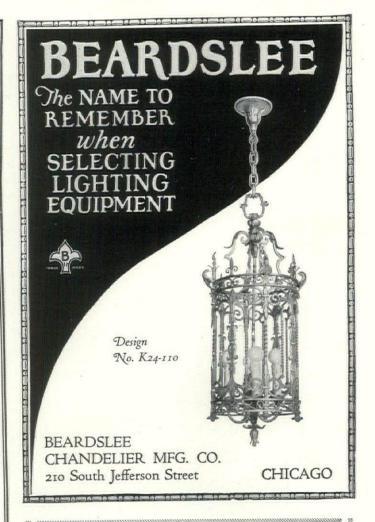
In addition to fine antique stained glass windows our studios execute mural paintings. Information about the glass or the murals will be sent upon request.

THE : GEORGE: HAROY: PAYDE STUDIOS: ID.CORPORATED

STUDIOS AID MAIN OFFICE AT PATERSON: NEW JERSEY SOUTHERN: OFFICE

TRAVELERS: BLOG: RICHMOND: VA.

CHURCH: WINDOWS OF MURAL: PAINTINGS





Mantel from "Davanzati Palace"

Jacobson Mantel & Ornament Company

### ARTIFICIAL STONE MANTELS

322-4 East 44th Street, New York

ALSO COMPO ORNAMENTS FOR WOODWORK
LOUIS GEIB ARTHUR P. WINDOLPH

In every way the Wrigley Building combines good looks with efficiency. Hence the choice of Bar-reled Sunlight for interior painting

# Durable beauty

the standard that determined the use of Barreled Sunlight for interior painting in the great Wrigley Building . . .

THE corridors, stair-halls, and elevator shafts in the Wrigley Building one of Chicago's finest structures—are painted with Barreled Sunlight.

"We buy this paint," say the agents for the building, "because it keeps its gloss despite frequent cleaning. After repeated washing the finish appears as fresh as that of newly painted walls.

"Everything considered we find that Barreled Sunlight gives us all the results that we might expect from higher priced enamels."

TUNDREDS of fine modern buildings I have had this same agreeable experience. Handsome as the finest enamel. Barreled Sunlight costs less, is easy to apply, and requires fewer coats. Its satin-smooth surface can't hold dirt.

Guaranteed to remain white longer than any gloss paint or enamel, domestic or foreign, applied under the same conditions.

Where a tint is desired, Barreled Sunlight may readily be tinted with ordinary oil Quantities of 5 gallons or over colors. tinted to order.

Sold in 55- and 30-gallon churn-equipped steel drums, and in cans from 1/2 pint to 5 gallons. Available in both gloss and semi-gloss. Where more than one coat is required, use Barreled Sunlight Undercoat first.

See our complete catalogue in Sweet's Architectural or Engineering Catalogue. Note coupon below.

#### U. S. GUTTA PERCHA PAINT CO.

Factory and Main Offices
3 DUDLEY STREET, PROVIDENCE, R. I.
New York—350 Madison Ave. Chicago—659 Washington Blvd.
San Francisco—156 Eddy Street

# Barreled



#### U. S. GUTTA PERCHA PAINT CO.

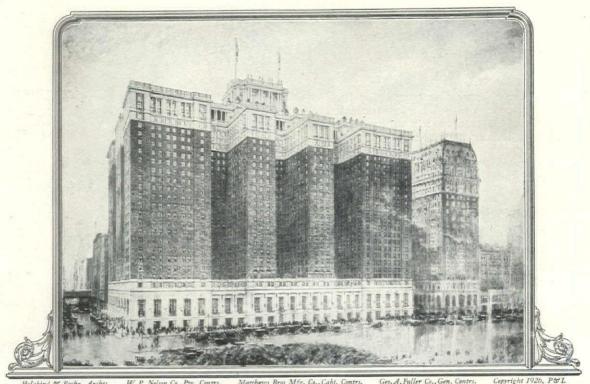
3 Dudley Street, Providence, R. I.

Please send me your booklet, "3 Questions Answered," including specifications, and a panel painted with Barreled Sunlight.

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

## Permanency of beauty on the woodwork in the new Stevens Hotel is assured with

### PRESERVATIVE VARNISH



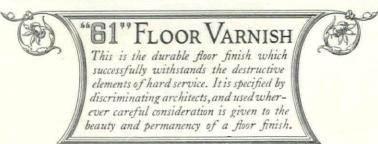
HE new Stevens Hotel in Chicago will be the largest hotel in the world — three thousand rooms, the woodwork of which is finished with "38" Preservative Varnish. The use of "38" Preservative Varnish on the interior woodwork is in keeping with the general high character of this new hotel, a monument to the architects and contractors. Made for the very highest type of interior woodwork, "38" Preservative Varnish is naturally selected for buildings of outstanding merit. Its fullbodied finish and exceptional durability are qualities that satisfy architects and owners alike.

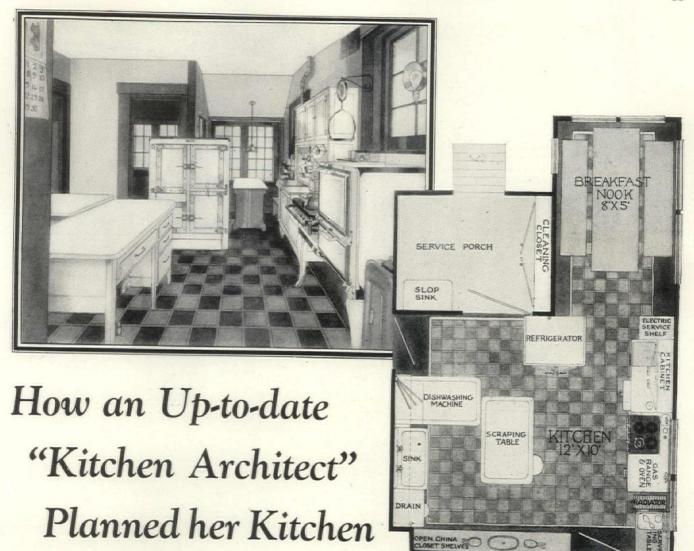
"38" Preservative Varnish is but one of many Pratt & Lambert Varnish Products which have established a reputation for quality and service. Architects in the United States and Canada have long recognized their dependability and specify their use on all classes of buildings.

Consult the Pratt & Lambert Architectural Service Department - its members will be glad to help you solve your finishing problems.

PRATT & LAMBERT-INC., 122 Tonawanda St., Buffalo, N.Y. Canadian Address: 34 Courtwright St., Bridgeburg, Ont.

### PRATT & LAMBERT VARNIS





ARCHITECTS will be interested in the plan of the "model kitchen" shown above. Designed by a nationally known household efficiency expert, the kitchen has been divided into two units—one for the preparation of food, and one for the clearing process. Observe how each unit has been arranged with an eye for convenience and the saving of steps.

Obviously, this design is not applicable to every case. Yet the principle of arranging the various parts so that food moves in a continuous line is sound, and may be used successfully in any kitchen.

In planning any kitchen consideration should also be given to color, cheerfulness and cleanliness. These can always be secured by the use of proper finishing materials—materials that are not only waterproof and long-wearing, but colorful.

Finishes such as Valspar and Valspar in Colors meet the most exacting requirements of modern kitchen use. For Valsparred surfaces not only withstand the effects of destructive agents such as soap, hot water, grease, acids, alkalies, etc., but they are as lustrous and beautiful as they are easy to clean.

Your clients will appreciate a kitchen which embodies the features described. For they mark the difference between a job that's just ordinary and one which is 100% satisfactory.

VALENTINE & COMPANY Established 1832

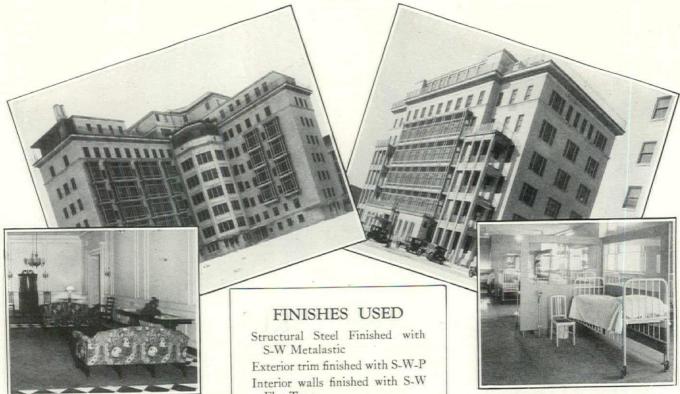
Largest manufacturers of high-grade varnishes in the world



VALENTINE & COMPANY

New York Chicago Boston Toronto Paris London Amsterdam

W. P. Fuller & Co., Pacific Coast



MATERNITY HOSPITAL Architect: ABRAM GARFIELD, Cleveland Contracting Agents: CROWELL-LITTLE Co., Cleveland JOHN GILL & SONS, Cleveland

Flat-Tone

Interior wood work finished with S-W Old Dutch Enamel

Interior varnished surfaces fin-ished with S-W Scar-Not

Metal shelving and cupboards fin-ished with S-W Opex Lacquer

BABIES' AND CHILDREN'S HOSPITAL Architect: ABRAM GARFIELD, Cleveland Contracting Agents: CROWELL-LITTLE Co., Cleveland JOHN GILL & Sons, Cleveland

# Two new Cleveland Hospitals

# finished entirely with SHERWIN-WILLIAMS products

HESE two new Cleveland Hospitals are finished with Sherwin-Williams products throughout. The specific product used in each case is shown in the panel above.

Sherwin-Williams finishes are especially recommended to the Architect because he can specify them and be assured that he is getting the very highest quality paints, varnishes, enamels and lacquers.

For your convenience we have prepared the Architects' Painting Guide. It gives concise recommendations for the best and most durable finish to use on each type of surface. Many architects are finding it a practical help in specifying paints. We recommend it to you. A copy will be sent on request.

The Sherwin-Williams Company, 882 Canal Road, Cleveland, Ohio.



# ZAIPOIN

Announcing

# ODORLESS BRUSHING & SPRAYING LACQUERS & LACQUER ENAMELS FOR FINISHING INTERIOR SURFACES



THE perfection of OBS Lacquers and Lacquer Enamels by The Zapon Company is the most important step made in the development of architectural finishing materials within the past century.

OBS Lacquers and Lacquer Enamels are true pyroxylin base finishing materials. The base is a combination of nitrocellulose together with various purified gums dissolved in a solvent mixture. They dry quickly due to the evaporation of the solvent, differing in this respect from oil base materials which dry slowly by oxidation. Because of this characteristic, the film produced by OBS Lacquers and Lacquer Enamels is thoroughly stable, whereas that produced by oil base

materials continues to absorb oxygen and becomes brittle, causing it to check and break down. The adoption of pyroxylin base finishing materials by the automotive, furniture and many other industries, demonstrates their superiority.

OBS Lacquers and Lacquer Enamels are especially adapted for architectural finishing for the reason that they are manufactured with the aid of a new solvent which permits their application by either brushing or spraying. They are free from the objectionable odor commonly associated with pyroxylin lacquers and so may be applied by the professional finisher without causing him discomfort.

A booklet containing a complete description of OBS Lacquers and Lacquer Enamels, together with specifications formulated from practical application on various types of surfaces will be sent, free of charge, to any architect, builder or decorator upon request.

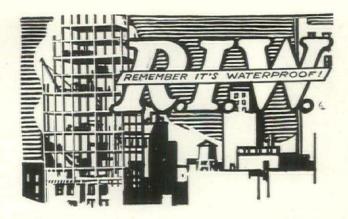
#### THE ZAPON COMPANY

247 Park Avenue, New York City

#### BRANCHES:



~ The pioneer lacquer finish ~ ~



#### STRENGTHENS THE LINE OF LEAST RESISTANCE

In every industry throughout the world, there are vital spots bared to the crashing impact of the elements, the insidious corrosion of chemicals, the ceaseless attack of bacteria. Massive bridges of concrete, towering sky-scrapers of stone and steel, sturdy structures of wood—representing millions of invested capital—are the victims.

Sheathed with the protective armour of "R. I. W." technical paints and waterproofing compounds, their resistance strengthens, their weaknesses disappear.

"R. I. W." products, for steel, concrete, brick or wood, keep pace with the growing needs of every industry, curtail loss of money, prolong usefulness of plant and structure, and settle for all time the question of the one, dependable coating. Feel free to call on "R. I.W.'s" engineers with your special problems.

Consult Sweet's Catalogue for Specifications

#### TOCH BROTHERS

Established 1848

Technical Paints



Waterproofing Compounds

443 FOURTH AVENUE . NEW YORK

Remember It's Waterproof



### ROOKWOOD FAIENCE

Decorated tiles as illustrated above offer infinite selection in design and color with unlimited possibilities for beautifying interiors. Made in mat and enamel glazes to meet special requirements. We invite inquiries.

THE ROOKWOOD POTTERY CO.

Architectural Department, Cincinnati, Ohio



W C 3403

### WARMAN AND COOK

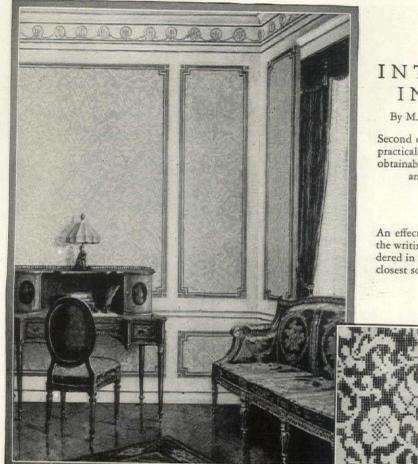
Designers and Manufacturers

WORKERS IN METALS LIGHTING FIXTURES

GOTHIC CHURCH LIGHTING IN HAND WROUGHT IRON

HOME FIXTURES OF DISTINCTION

Telephone Caledonia 4204 209 East 39th Street New York City



#### INTERESTING INTERIORS

By M. REA PAUL, Consulting Colorist

Second of a series of articles discussing practical uses of the newer wall finishes obtainable with Dutch Boy white-lead and Dutch Boy flatting oil.

An effective use of the Lace-Stencil Finish in the writing-room of a hotel. The pattern is rendered in such minute detail that even under the closest scrutiny it holds the observer's interest.

> Close-up showing the intricacy of pattern obtained by using the Lace-Stencil Finish in the room illustrated.

Interior reproduced from full-color picture appearing in "Decorative Possibilities of Paint," a valuable new booklet that will be sent upon request.

### The LACE STENCIL FINISH

THE effect shown in this hotel writing-room is not difficult to obtain. A lace curtain of large mesh is made non-absorbent by a thin coat of shellac. Then the lace is used as a stencil, through which a finishing coat is tamped with a stencil brush, over a ground coat that has been allowed to dry. The result is a clean-cut pattern of intricate design. It is known as the Lace-Stencil Finish.

The Lace-Stencil Finish should, as a rule, be used in panels. The most satisfactory results will be obtained if the lace selected is as large in area as the panel in which it is to be used, since it is extremely difficult to join one large piece of lace to another. For this same reason, the Lace-Stencil Finish is not suited for use as an all-over pattern.

The Lace-Stencil Finish also makes a decidedly interesting border. The border may be applied just inside the panel mouldings, or used as a frieze on the upper side walls of a small interior.

#### Where to use it

The rooms in which the Lace-Stencil Finish, employed in panels, appears to best advantage are: living-room or boudoir of the home; private dining-room of the hotel; small parlor or writing room of the hotel; ladies' parlor at the club. It is also used to lend a distinctive atmosphere to

the decorative treatment of the theatre, the ballroom, and the interiors of the more elaborate residence.

#### Write for free booklet

"The Decorative Possibilities of Paint" is a valuable, new booklet containing full color illustrations and complete instructions on how to obtain many interesting wall finishes with Dutch Boy white-lead and Dutch Boy flatting oil. You may obtain your copy of this booklet by writing our nearest branch.

National Lead Company maintains a special Department of Decoration conducted by color specialists. These men will be glad to assist you, without charge, in planning decorative wall treatments for any type of building. They will help select the schemes of treatment, submit for your approval color suggestions and color renderings when necessary, and if you wish, assist in the writing of your specifications. Address the Department of Decoration in care of our nearest branch.

#### NATIONAL LEAD COMPANY

New York, 111 Broadway; Boston, 131 State Street; Buffalo, 116 Oak Street; Chicago, 900 West 18th Street; Cincinnati, 659 Freeman Avenue; Cleveland, 820 West Superior Avenue; St. Louis, 722 Chestnut Street; San Francisco, 485 California Street; Pittsburgh, National Lead & Oil Co., of Penna., 316 Fourth Avenue; Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.





100% PURI

#### because-

FOSSIL GUMS when used in varnish have excellent linseed oil absorbing and amalgamating powers, and form a hard, tough, durable and elastic film.

Substitutes for fossil gums are rosin or ester gum (treated rosin).

LINSEED OIL dries, by the absorption of oxygen, to a most elastic and durable

CHINA WOOD OIL is the most water-resisting oil commonly used in Varnish manufacture.

When combined with linseed oil and fossil gums in the proper proportion it makes a Varnish film more waterproof.

TURPENTINE is the most satisfactory solvent and thinner for a long-oil fossil gum Varnish. It dries partly by absorbing oxygen from the air, and in the drying of Varnish the film of vegetable origin thus created, readily combines with the film of fossil gum and oil (both of vegetable origin).

Mineral spirits (naphtha, benzine, kerosene and gasoline), all distilled from petroleum, evaporate rapidly and completely and do not benefit the Varnish

Know what you buy

NO BENZINE - NO ROSIN

Murphy Varnish Company is engaged in making varnish and other finishes growing out of varnish experience. The business was founded sixty years ago by Franklin Murphy, who became Governor of New Jersey. The men now interested in the company grew



up under his administration and were trained by him, and inherited, not only the knowledge of making varnish and the experience of applying it to various surfaces, but also the belief that no sale is profitable unless both parties are satisfied.

# Astonishing SPEED In Finishing Floors

Murphy Pyroxylin Wood Preparation is a combination stain, filler and waterproofing material of the pyroxylin or nitro cellulose family for use as a first coat on wood. It is our own patented product—the only filler on a pyroxylin base. This material has demonstrated its remarkable qualities on all kinds of architectural work such as floor work. Many architects will consider it an ideal method. Its chief advantages are its permanence, beauty, economy, ease of application and its quick drying quality. It is brushed on like an ordinary paste filler and then after about twenty minutes rubbed off crossways of the grain with tow or burlap. The floor may be used immediately after Murphy Pyroxylin Wood Preparation is rubbed off.

The next day finishing coats of lacquer or wax may be applied and the job is done. This material comes in eight standard colors. Because it does not raise the grain of wood, its use eliminates sanding.

We shall be glad to have a representative demonstrate Murphy Pyroxylin Wood Preparation to you and to send you a color card showing the colors in which this material is available.

Won't you write us to have a demonstrator call?

# Murphy

PYROXYLIN Wood Preparation

MURPHY VARNISH COMPANY
NEWARK · CHICAGO · SAN FRANCISCO · MONTREAL

## It Artistically Solves Many Landscaping Problems

For the stucco type of residence, Dubois is especially well suited. It gave this bome on the New Jersey shore a softening influence, besides serving as an excellent windbreak.



Apartial list of prominent Dubois users is contained in this portfolio Nowhere can you find a fence of rarer beauty or with as many practical uses as Dubois. Made in France of straight, live, young chestnut saplings, closely woven together, this product of nature blends beautifully with any style and period of architecture. If your problem is to hide some unsightly view—to keep people from staring in — or to add a touch of rustic beauty and Old-World charm to an estate or garden, you can do it economically and artistically with

# DUBOIS Woven Wood Fence

Made in France

Robert C. Reeves Company, 187 Water Street, New York Please send, without obligation, your new portfolio illustrating the many interesting ways Dubois is being used.

Name

Address

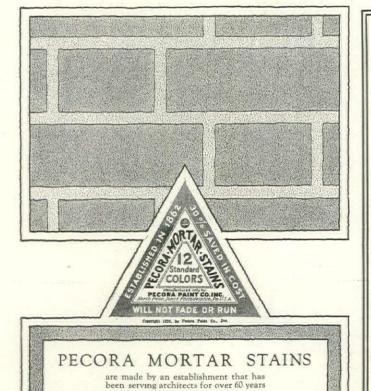
City\_\_\_\_

Dubois is now made in miniature and supplied free of charge to architects for use with model houses. It lends a very realistic touch, and will help materially in giving your client a clear idea of your landscaping plans. Tell us how many inches of Miniature Dubois you need, and we will gladly send it, without obligation to you.

ROBERT C. REEVES CO.

187 Water Street

New York



12 STANDARD UNFADING COLORS
Information on Request
PECORA PAINT COMPANY

4th St. & Sedgley Ave., Philadelphia, Pa.

Established 1862 by Smith Bowen

# FRENCH'S FLAT FINISH

"The True Flat Paint."

Will not flake or peel.

Write us for detailed information.

Samuel H. French & Co.

Paint and Varnish

Manufacturers

PHILADELPHIA

CAMDEN

Established 1844

Incorporated 1920



MAIN ENTRANCE

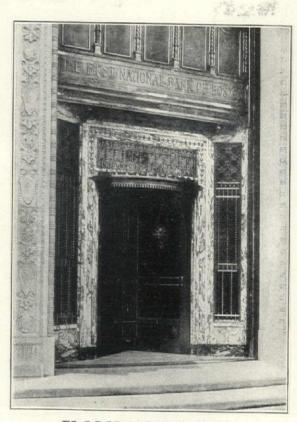
In creating the finest banking establishment in South America, only the best materials and artisanship were employed.

All interior Bronze work was supplied by Gorham.

# THE FIRST NATIONAL BANK OF BOSTON BRANCH AT BUENOS AIRES REP. S. A.

YORK AND SAWYER
CHAMBERS AND THOMAS
ASSOCIATED ARCHITECTS

BUILT BY STONE & WEBSTER, INC.



FLORIDA ENTRANCE

FOR QUALITY SPECIFY
BRONZE BY



BRONZE DIVISION

PROVIDENCE, R. I.

NEW YORK, N.Y.



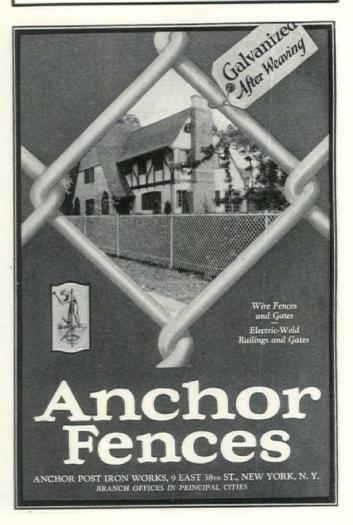


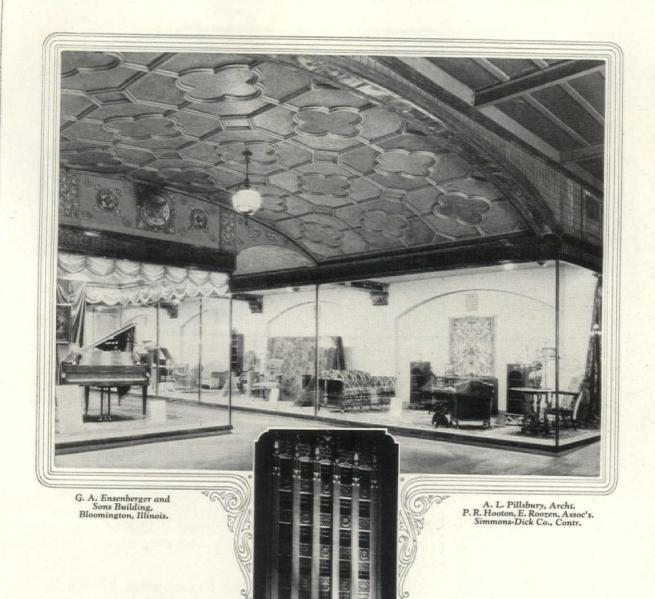


# for inside trim

On the graceful sweep of the stairway, on doors, on windows and all other interior trim; for bathrooms and built-in furniture, and for many exterior surfaces—Ripolin, the original Holland enamel paint, insures a striking beauty that endures. Used for forty years on the finest buildings abroad, Ripolin is widely specified for the finest homes here today. Get the Ripolin Book—it is free.

THE GLIDDEN COMPANY National Headquarters—Cleveland



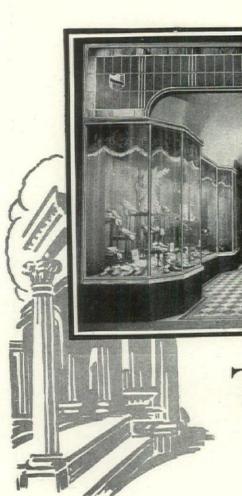


The large, costly plates of glass in this beautiful store front are safely set in KAWNEER SOLID COPPER STORE FRONT CONSTRUCTION. Many of our architectural copper mouldings were used in the development of its design.

Send for catalog and full size details.



BRANCH OFFICES AND SALES AGENCIES IN 90 CITIES



# The Staying Power of Brasco

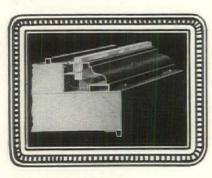
The complete store front construction of patented design is the architect's only safe choice. Constructions assembled haphazard can have no unity either of line or strength—the architectural beauty is missing, the structure lacks staying power.

The complete manufactured Brasco store front is built for its specific purpose. It has its patented features of design, which give the architect his full assurance of glass safety, long service, permanent beauty, adequate ventilation and drainage, and other essentials.

The story of Brasco merit is written in the thousands of installations everywhere—from the individual shop to chain stores, from automobile showroom to industrial building. It has proven its claims in actual service to unnumbered architects.

To those who have not had occasion to compare its merits, we offer full size samples for detailed examination. A screw driver will bare the parts to scrutiny. The more detailed the inspection, the more convincing will the results be. Brasco has always invited the searching light of strict comparison. Write us for samples, full size details and catalog.





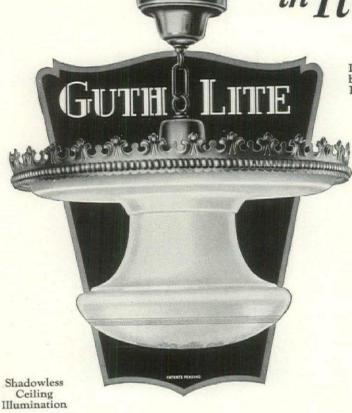


BRASCO MANUFACTURING CO. 5031 Wabash Ave., Chicago

Eastern Sales Office and Warehouse 28-14 Wilbur Ave., Long Island City, N. Y.



A New Triumph in Illumination



Designed and made by the inventors of BRASCOLITE

# ontrols and Directs Light

Wonderful new features are embodied in this new, totally enclosed illuminator-a new triumph in modern interior illumination.

The reflector is adjustable up or down, controlling the direction of light vertically and horizontally Portion of the scientifically designed globe extends above reflector, providing shadowless ceiling illumination.

Note the beauty of this new unit. Beauty and efficiency combined!

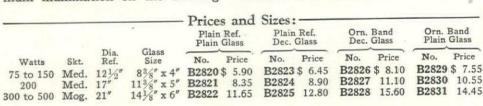
GuthLite gives a glareless flood of softly diffused white light. Maximum illumination on the working plane. More light where most needed! Extremely wide light distribution. Low brightness at the

Canopy, hanger and ornamental metal band are finished in Antique Bronze. Reflector is White Porcelain Enamel with Ivory band. Made in plain and ornamental types. Packed in individual cartons. Complete. Ready to install.

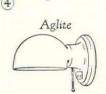
#### Write for GuthLite Folder

It illustrates the various types of GuthLite, is regulation size, and bears A. I. A. file number.

- (1) Adjustable white porcelain enameled reflector controls direction of light vertically and horizontally. Wide light distribution. Uniform intensity on the working plane.
- (2) Adequate, shadowless illumination of the ceiling by portion of globe which extends above the reflector. Light reflected to the ceiling as well as to the useful plane.
- Ceiling light increased or diminished by raising or lowering re-
- (4) Low brightness at the source. No spots of high intensity. No glare.
- (5) Lamp filament positioned so that most of the light rays are diffused through neck of globe toward reflector, which directs them to the working plane over a wide area.
- (6) Adaptable for installation to any type of electric outlet or ceiling construction.
- (7) Glass globe scientifically designed to produce efficient total output and low brightness at the visible part of the globe.
- (8) Easily and quickly installed. Openlink hanger, so that additional chain can be added if desired.
- (9) Self-adjusting spring globe holder permits expansion of glass, preventing rattling or breakage.
- (10) Globe quickly applied or released for cleaning or re-lamping. Cleaned in a minute.









Lighting Equipment ST. LOUIS, U.S.A.



Washington Duke Hotel, Durham, N. C., equipped with MONAX GLOBES. Stanhope S. Johnson and R. O. Brannan, Archi-tects, Lynchburg, Va.

# The Shadow

OF THE new hotels that are constantly opening their doors to the traveling public, it is noticeable that the ones enjoying the greatest patronage are those that are equipped to provide every service which might add, if only in small measure, to the comfort of their guests.

Just such a hostelry is the Washington Duke Hotel, Durham, N. C., one of the finest in the South. For its lighting equipment, Monax Globes were selected as one of those important items of comfort that directly or indirectly attract a preferred trade.

Monax Globes, "The Shadow Chasers," were chosen because by actual test they provide a softer and more perfectly diffused illumination than almost any other lighting glassware, spraying light uniformly in all

directions, yet absorbing scarcely any of it. The architects who specify Monax know just



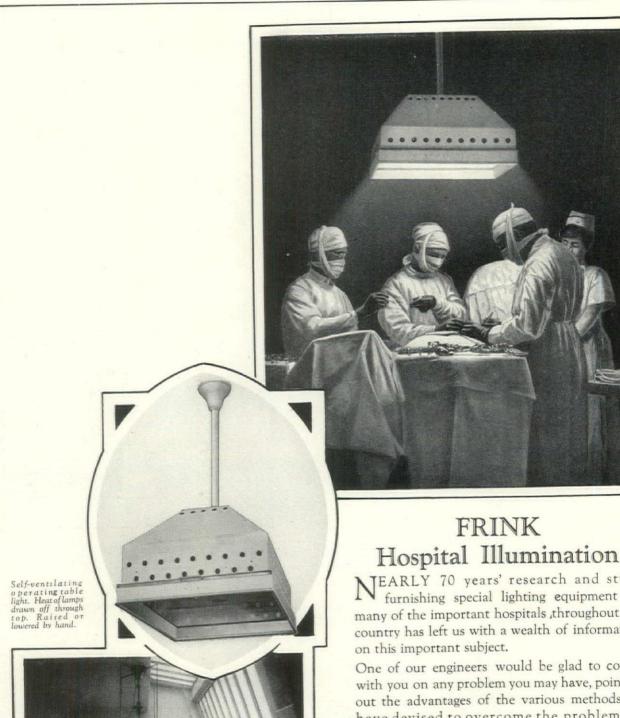
Monax No. 3870 K181, selected for use in the Washington Duke Hotel, as well as for many other notable installations.



what results these globes will give: cheerful dining rooms, absence of shadow in lobby and corridor, and plenty of restful, glareless light in the guest rooms.

Whether your lighting problem is that of a hotel or some other project, our Illuminating Engineering Department will gladly help you in its solution. This co-operation is always yours for the asking and entails no obligation whatsoever. Macbeth-Evans Glass Company (Eastern Division), Department J, Charleroi, Pennsylvania.

MONAX A GLOBES Commercial Lighting



NEARLY 70 years' research and study furnishing special lighting equipment for many of the important hospitals throughout the country has left us with a wealth of information

One of our engineers would be glad to confer with you on any problem you may have, pointing out the advantages of the various methods we have devised to overcome the problems of hospital illumination.

# E FRINK CO. Inc.

#### 24th Street and 10th Avenue, New York

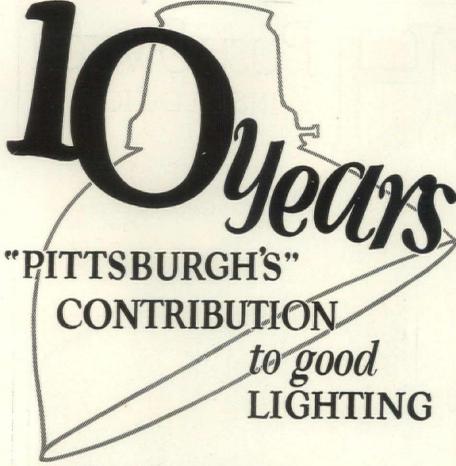
Chicago, Ill. San Francisco, Cal. Seattle, Wash. St. Louis, Mo. Boston, Mass. Cleveland, Ohio Buffalo, N. Y. Atlanta, Ga. Birmingham, Ala. Pittsburgh, Pa. Detroit, Mich. Portland, Ore. Cincinnati, O. Washington, D. C. Philadelphia, Pa. Los Angeles, Cal. Salt Lake City, Utah

#### CANADA

Associated with The Robert Mitchell Co., Ltd. 64 Belair Ave., Montreal

#### ENGLAND

30-35 Drury Lane-Kingsway, W. C. 2, London



### A Silvered Glass Reflector That Does Not Deteriorate!

That is the contribution of the Pittsburgh Reflector Company to the lighting industry.

Lighting engineers have said for years that silver-plated glass had the highest reflecting efficiency. But when the large lamps came in, with their intense heat, it was found that the reflecting surface tarnished and discolored.

That was the situation on August 1st, 1916, ten years ago. Then the Pittsburgh Reflector Company solved the problem, and not one reflector made since that time has ever been reported to us as having the silvered reflecting surface tarnish or discolor, or the backing crack, check or peel.

Every "Pittsburgh" reflector is guaranteed for five years. We have more than made this guarantee good by manufacturing reflectors whose brilliance has already been fully retained through twice the number of years represented by the guarantee.

### PITTSBURGH REFLECTOR COMPANY

411 Bowman Bldg. 3rd & Ross Sts. Pittsburgh, Pa. REPRESENTATIVES IN 26 LEADING CITIES

# "Pittsburgh" Silvered Relectors STAY BRIGHT

# Results of this Great Contribution to the Lighting Industry

When the Type "C" lamp came on the market in 1915 trouble began for manufacturers of silvered glass reflectors, owing to the greater heat of this new lamp. Manufacturers and engineers sought means of overcoming this trouble, whereby the silvered reflecting surface could be made permanently efficient.

The problem was solved by the Pittsburgh Reflector Company ten years ago—and thus far we have succeeded in keeping the method secret.

It is not sufficient that a reflector installation be effective when first installed. Initial efficiency is important, of course, but it is far more important that this fairtial efficiency be maintained throughout a reasonable period of time.

Any reflector which turns dark soon becomes worthless. Not only does such a reflector fail to serve the purpose for which it was bought, but it becomes a source of waste instead of profit.

Darkening of the reflecting surface of a reflector can easily lessen the output of light 10 per cent, 20 per cent, even one-third or one-half.

A depreciation of 10 per cent causes a waste of \$1.00 per year per 100 watt lamp; \$1.80 per year per 150 watt lamp; \$2.40 per year per 200 watt lamp.

A depreciation of 25 per cent means a waste of current amounting to \$3.00 per year per hundred watt lamp; \$4.50 per 150 watt lamp; or \$6.00 per year per 200 watt lamp.

The waste of current may easily exceed the initial cost of the installation, within two or three years.

This refers only to the wasted current—money paid out for which nothing whatever is received in return.

But more important in window lighting is the fact that any deterioration lessens the attention value, decreases the number of people who view the display, and cuts down sales and profits.

In case of cove-lighting, it is particularly important that the reflectors stay bright, because the ceiling and walls which constitute a second reflecting surface deteriorate as they become dirty. Ceiling and walls can be cleaned or painted; but deterioration of the reflecting surface of a reflector calls for new installations.

It is of great importance, therefore, not only that reflectors maintain their initial efficiency, but also that the initial efficiency be as high as possible.

The Pittsburgh secret method of protecting the silvered reflecting surface resulted ten years ago in the production of a reflector with the highest possible efficiency and having a permanent reflecting surface.



BARKER BROS. FURNITURE CO. LOS ANGELES.

CURLETT & BEELMAN
ARCHITECTS.

GOLDEN STATE
ELECTRIC CO.
ELECTR.
CONTR'S.

### In the Largest Retail Furniture Establishment in the World

ARCHITECTURALLY and commercially, the governing motif in a great store is—Display.

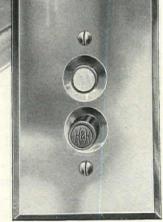
Especially in the staging of fine furniture, the element of effective display must needs dominate the interior detail.

In control of the lighting, H&H Push Switches carry out the designers' aims and sustain the quality of the setting.

It's "OLD RELIABLE" No. 2081 in the specifications.

THE HART & HEGEMAN MFG. CO. HARTFORD, CONN.

Makers of Electric Switches since 1890



"OLD RELIABLE"2081

# Add this fine Structure to the Skyline of Sol-Lux

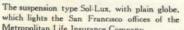


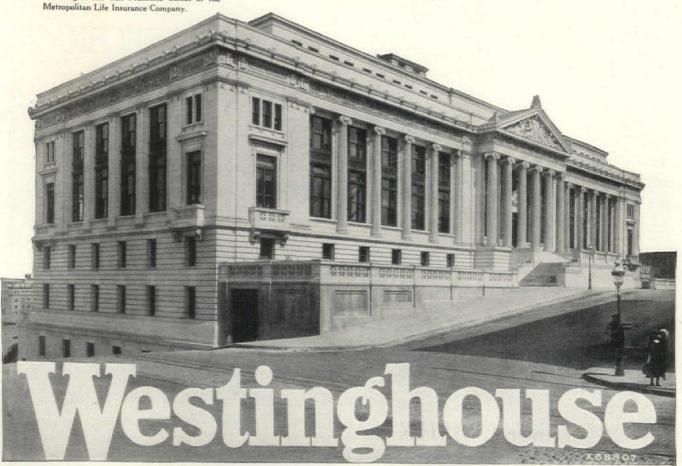
HE Metropolitan Life Insurance Company building at San Francisco takes its place in the ranks of those fine structures in which Sol-Lux lighting serves.

That's a sterling tribute to the worth of Sol-Lux, one that reflects full well the keen discernment of the men and the organization behind the building. For, with Sol-Lux, lighting is afforded that cannot be surpassed by any other lighting unit, and the dust-proof globe with the "tilt out" cap, that facilitates relamping, assures much lower maintenance expense than required by ordinary lighting units.

Get the full story of Sol-Lux, the practical lighting unit. Then specify Sol-Lux for your buildings.

Westinghouse Electric & Manufacturing Co. Merchandising Department South Bend, Indiana







# Troy, N. Y. Solves its Hitching Post Problem!

Not the hitching post problem of 20 years ago but the hitching post problem in its new dress; the motor parking evil.

The plan as evolved and carried to success in Troy, N. Y. is applicable to any city that is large enough to have a motor parking problem.

To architects and those representative citizens of any community who are earnestly endeavoring to solve their curb parking problems we'll be glad to submit the plan. There's no obligation, of course.

An attractive brochure, THE HITCH-ING POST PROBLEM IS HERE AGAIN, explains the program more in detail.

Your name on our complimentary architectural list "F-8" brings it to your desk.

The HOCKENBURY SYSTEM Inc. PENNSYLVANIA HARRISBURG

### "Red Metal" Solid Bronze SASH CHAINS



Universally Used Because of Quality and Strength

The SMITH & EGGE MFG. CO. BRIDGEPORT, CONN.

ORIGINATORS OF SASH CHAINS

See Page 1443, Sweet's Catolog and Pages 68-69 Specification Manual of The American Architect. Send for catalog of other Sash Chains.

# THE CUTLER MAIL CHUTE

manufactured in our own factory and installed by our own Experienced Factory Erectors, insuring uniform excellence of workmanship and prompt and satisfactory service.

Specify MODEL F Standard Equipment for Cutler quality at minimum cost. Send for form giving information required for estimating.

CUTLER MAIL CHUTE CO. General Offices and Factory

ROCHESTER, N.Y.

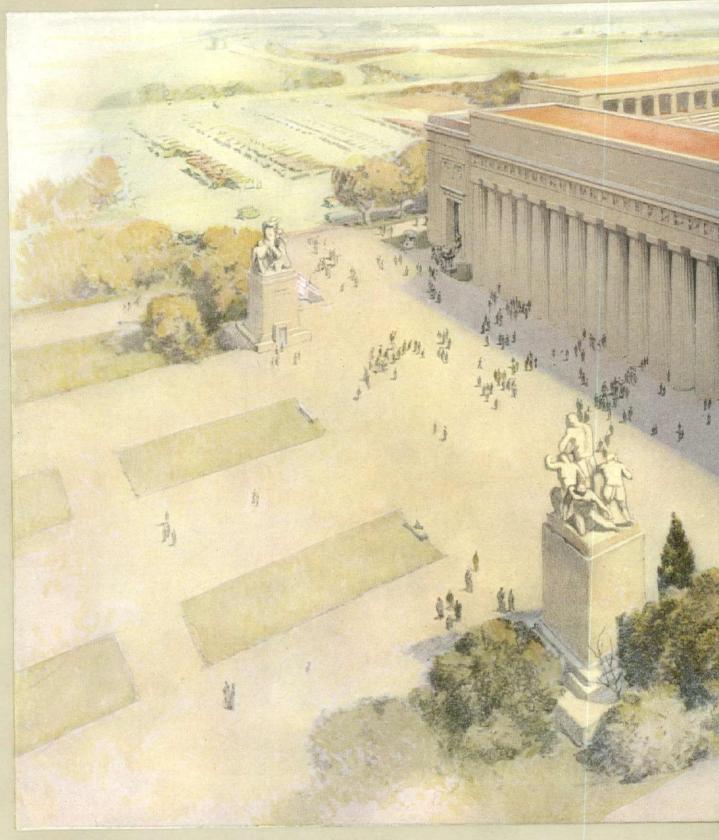


# DIXON CARNATION ERASER

We know you're going to like the Dixon Carnation Eraser. Just give it a tryout and watch the way it knuckles down to its job and cleans-up as it goes along. Our special process is responsible for its constant pliable efficiency. The more you use a Dixon Carnation Eraser, the more you'll realize it's the eraser you should keep within easy reach always.

Sample Offer—To give you the opportunity to see how the Dixon Carnation Eraser knuckles down and cleans-up, we will send you one free upon receipt of your name and address.

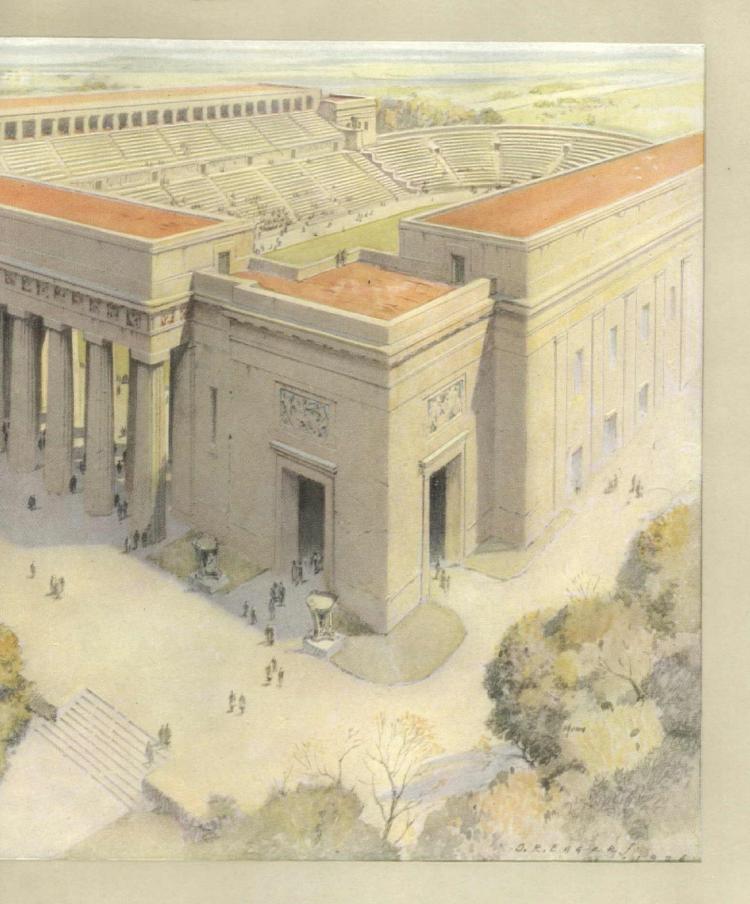
JOSEPH DIXON CRUCIBLE CO., PENCIL DEPT. 224-J JERSEY CITY, N. J.



The Memorial Stadium, by OTTO R. EGGERS, of the firm of John Russell Pope

# THE ARCHITECT'S VISION OF THE FUTURE

OTTO R. EGGERS here presents his conception of the Memorial Stadium of the future—a vast amphitheatre in everlasting concrete. "While we are more or less familiar with the various great modern stadiums that have been built, few people not in the building profession realize that without the use of concrete no permanent structure of this kind would be possible."



# TOWARD TOMORROW WITH LEHIGH CEMENT

THE growing demand for concrete construction will find Lehigh shaping its policy with eyes to future needs, just as today it is meeting all requirements with twenty mills from coast to coast.

Any architect or engineer can secure the series "The Architect's Vision of the Future," of which the above is one. Address Lehigh Portland Cement Company, Box 3-H, Allentown, Pa., or Chicago, Ill.

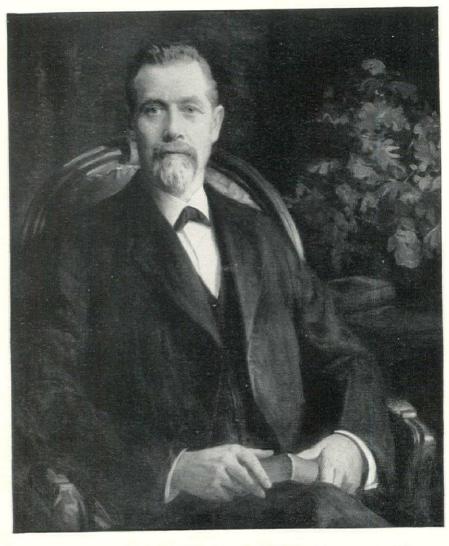
# John Davey's great contribution to America

John Davey was born in England, June 6, 1846, at a time when there were no public schools. This hardy and humble genius was twenty-one before he knew his A B C's. So he started in as a full grown young man to learn to read by the slow and painful process of self-education. He began with a little copy of the New Testament and a small dictionary, picking out one word at a time. Later he acquired a grammar so that he might put the words together properly, meanwhile studying horticulture and landscape gardening during a full apprenticeship at Torquay, England.

Then he heard the call of America, this great land of freedom and opportunity; and, like millions of other sturdy sons of Europe, he came here to work out his destiny. He pursued his education still further, working by day and studying by night, until he acquired an education that would do credit to the majority of college graduates.

Perhaps one of the most striking things about him was the fact that he became one of the finest Americans. He learned every word of our Constitution. He learned every word of every verse of America and the Star Spangled Banner; and, until old age laid its heavy hand upon him, he could sing those songs with a zeal that was good to see.

He became a full citizen at the first opportunity under our law, and to him it was a sacred day when he raised his right hand and



JOHN DAVEY, Father of Tree Surgery, "Do it right or not at all"

forswore allegiance to the British crown and swore allegiance to the Constitution and the flag of America. And always, during his fifty years of life in his adopted country whenever he passed by Old Glory, he would tip his hat in veneration.

John Davey saw with eyes of understanding the appalling neglect and butchery of America's trees, and he set out to find a way—a systematic, scientific way—to save them, little dreaming that a great business would be developed on the science that his love and genius created. And thus came into being the wonderful profession of Tree Surgery.

His first book, The Tree Doctor, was published in 1901, and then began the gradual development of The Davey Tree Expert Company, incorporated in 1909, doing a business

of nearly \$2,000,000 in 1925, and now having in the field nearly 700 master Tree Surgeons, all carefully selected, thoroughly trained, properly disciplined, and regularly supervised, and giving superior service to the tree owners of America. For twenty years the business of this institution has been managed by his son, Martin L. Davey, whose highest aim has been to perpetuate the ideals and philosophy of his pioneer father.

John Davey, though not now living, still lives in the spirit and purpose of the magnificent service that he rendered his adopted country—he taught the American people to think in terms of the living tree. Greater even than his creation of the invaluable science of Tree Surgery is his contribution as the apostle of the tree as a living thing.

THE DAVEY TREE EXPERT CO., INC., 359 CITY BANK BLDG., KENT, OHIO

Branch offices with telephones: New York, 501 Fifth Ave., Phone Murray Hill 1629; Albany, City Savings Bank Bldg.; Boston Massachusetts Trust Bldg.; Pittsfield, Mass., Stevenson Bldg.; Providence, R. I., National Exchange Bldg.; Philadelphia, Land Title Bldg.; Baltimore, American Bldg.; Washington, Investment Bldg.; Pittsburgh, 331 Fourth Ave.; Buffalo, 110 Franklin St.; Cleveland, Hippodrome Bldg.; Detroit, General Motors Bldg.; Cincinnati, Mercantile Library Bldg.; Indianapolis, Fletcher Savings & Trust Bldg.; Chicago, Westminster Bldg.; St. Louis, Arcade Bldg.; Kansas City, Scarritt Bldg.; Minneapolis, Andrus Bldg.; Montreal, Insurance Exchange Bldg.

# DAVEY TREE SURGEONS

Live and work in your vicinity—quickly available, within easy motoring distance—no carfare charged







#### FIRE ALARM EQUIPMENT **Giving Complete Protection**

In the consideration of fire protection, the selection and installation of the best

obtainable signaling apparatus is vitally important.

To remove the menace to life and property through fire, Holtzer-Cabot has

directed its resources for over half a century.

The successful results of this effort are best evidenced in the impressive and

ever growing list of important buildings Holtzer-Cabot equipped.

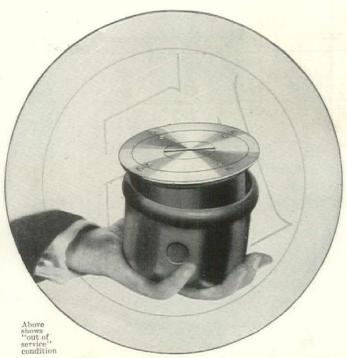
An interesting and instructive brochure on Fire Protection will gladly be sent to those interested.

MANUFACTURERS OF SIGNALING SYSTEMS FOR OVER FIFTY YEARS

THE HOLTZER-CABOT ELECTRIC COMPANY

125 Amory Street, Boston

6161 South State Street, Chicago





The cover is easily



Flat Plug is removed in cover and the cover eversed. Note the high im protection on "in ervice" side of cover



e Split Bushing ft) takes the place the Flat Plug



Service" condition Flat Plug is place the Floor Box for safe keeping

# SPECIFY (A) Floor Boxes

(with reversible covers)

Frankly, you will not find the same collection of good features elsewhere. @ Floor Boxes are adjustable. They can be installed at any angle, yet the top can be adjusted to the proper floor level. A Floor Boxes are substantial. They cost less than two-cover type. They become a permanent floor connection for lights, bells, buzzers, telephone, etc. A quick change from "out of service" to "in service," or vice versa, can be made at any time. @ Floor Boxes are water-tight. A heavy, round, long-life gasket gives full protection from all moisture. The inside is always dry. The wiring can never be damaged . . . You should be interested to learn more-

Send for the @ Catalog. It gives full details and is entirely free. Complete estimates furnished gratis; ask for them

ELECTRIC COMPANY

ST. LOUIS District Offices

Atlanta, Ga.
Baltimore, Md.
Boston, Mass.
Chicago, Ill.
Cincinnati, Ohio
C

Portland, Ore. Seattle, Wash. San Francisco, Calif. St. Louis, Mo. Winnipeg. Canada

CHICKICKICKICKICKICKICKICKICKI

# OORING



South Side Memorial High School Rockville Center, N. Y.

HUSE TEMPLETON BLANCHARD.

#### 50,000 square feet of DURAFLEX-A

continuous seamless sheet of ductile mineral rubber. Use smooths and toughens it. Properties: long life; high durability; so sound-absorbent

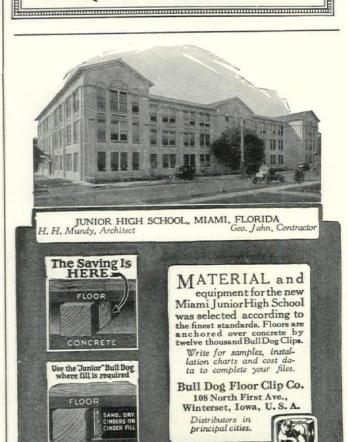
that footsteps are practically inaudible; dustless; unaffected by water, acids, or alkalis; the easiest floor to clean. Complete data upon request.

#### The DURAFLEX COMPANY, Inc.

Main Office and Plant: BALTIMORE, MD.

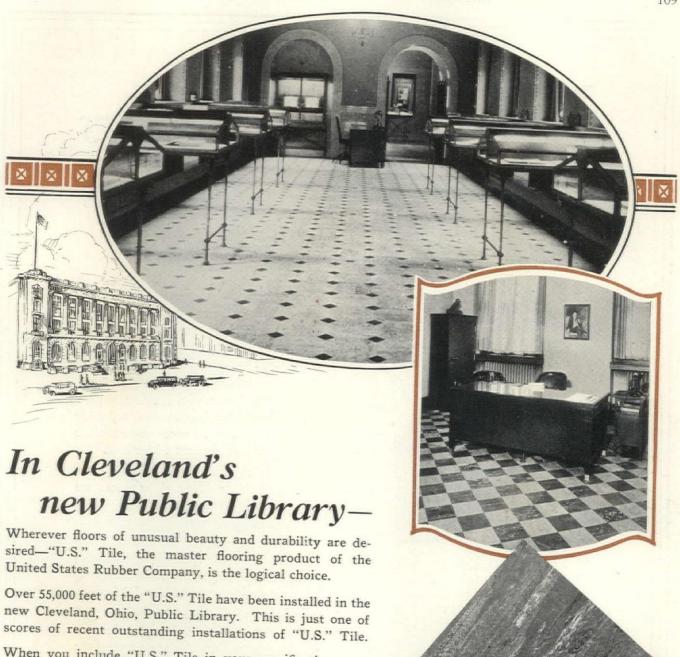
Offices: Boston, Philadelphia, New York, Washington, Pittsburgh. Representatives: Montreal, Can., Richmond, Cincinnati, Atlanta. Greensboro, N. C., Wilkes-Barre, Reading, Pa., Cumberland, Md.
Greenville, S. C., Los Angeles, San Francisco,

# OURAFLEX-A



ANCHOR WOOD FLOORS TO CONCRETE

CONCRETE



When you include "U.S." Tile in your specifications you guarantee your client flooring permanency, combined with remarkable colorful beauty—quietness—ease of cleaning—and exceptional economy of maintenance.

Available in a large variety of colors and designs. Write today for detailed specification data.

### United States Rubber Company



Flooring Department
1790 Broadway New York City



# "U.S." TILE FLOORING

# Maple for the floors in the famous Straus Building in Chicago



Guaranteed Floorings.

The letters MFMA on here to manufacturing and Maple, Beech or Birch grading rules which eco-flooring signify that the flooring is standardized particle of these remarkable and guaranteed by the woods. This trade-mark is Maple Flooring Manufacturers Association, whose members must attain and maintain the highest standards of manufacture and ad-

The Straus Building, Chicago, is one of the "sights" of that city - regarded as one of the finest office buildings in the world. Its owners placed behind their architects every resource. They were building for permanence in service and appearance.

The Straus Building is floored with Maple. The far-sighted projectors of the structure say: "It was decided to use wood because of its greater resiliency and warmth . . . . obtaining a surface more comfortable and pleasant under foot."

Today, after thousands of people have trudged through the building, these floors are as inviting as the day they were laid.

Ten years from now visit the Straus Building, and see the fine, smooth, polished condition of the floors! It will be interesting in 1936 for an expert to figure the saving accomplished by using beautiful, tight-grained, tough-fibred Maple.

Your architect will tell you how, when and where to use Maple flooring. Ask your lumber dealer for quotations. Send for any or all of the free booklets listed.

- ☐ Hardswood Flooring in Office Buildings.
- ☐ Floors for Educational Buildings.
- ☐ Roller Skates and Service Floors.
- ☐ Three Native Hardwoods of Sterling Worth.
- ☐ The Floors for Your Home.

Maple Flooring Manufacturers Association 1057 Stock Exchange Building, Chicago

Floor with Maple
Beech or Birch

THIS colorful floor in the shop of Hall Brothers Stationery Company, Kansas City, Mo., harmonizes beautifully with the entire decorative scheme. It is composed of ten-inch alternate squares of Light Brown and Dark Brown Linotile with a quarter-inch black interliner between. The border is formed of one-inch Light Brown and half-inch Black Linotile.



OT the least important detail in making a store attractive to buyers is a floor that is comfortable to walk on, pleasing to look at – such a floor as Linotile. Its resilience and noiselessness under foot and its fresh, clean colors and attractive designs create an impression of quality and refinement—an invitation to "come in again."

Linotile, with its wide variety of design and color, not only meets every architectural requirement of beauty and harmony with the decorative scheme, but is at once practical and economical.

Linotile is *practical* for the store floor because it can be laid over any smooth, dry base and readily adapted in design to areas of any shape or size. It is easily cleaned and, regardless of wear, remains as smooth and bright as the day it was laid.

Linotile is an *economical* store floor because its first cost is reasonable and its upkeep very low. It needs no refinishing, no varnishing. It does not buckle or crack, and is remarkably durable, showing little trace of wear even at doorways and counters.

Linotile is a cork composition made in tile form. It is resilient, nonabsorbent and nonslippery. It is furnished in 12 colors and in squares, oblongs and strips of many sizes. Linotile and its uses for stores is fully described in the 36 page book, "Linotile Floors for Public and Semi-Public Buildings." Copy and sample sent on request.

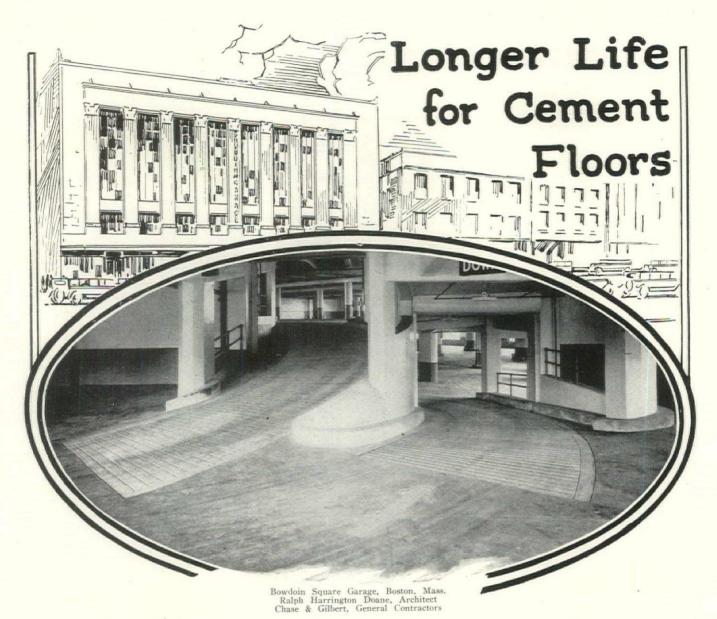
#### ARMSTRONG CORK & INSULATION COMPANY

Division of Armstrong Cork Company

132 TWENTY-FOURTH STREET

PITTSBURGH, PA.

# Linotile Floors



THE ramps in this garage—one of Boston's newest and finest—have been made both slip-proof and durable by using Alundum Aggregates in the cement. And the slip-proof feature is not affected by water and oil. The aggregates have also been used in the treads of the main stairway.

Alundum Aggregates are a semi-vitreous product made by bonding hard, tough Alundum abrasive with clay. Their slightly porous structure causes them to bond perfectly with cement, becoming an integral and permanent part of the floor. The result is a walking and trucking surface that combines exceptional resistance to wear with slip-proof effectiveness.

Alundum Cement Floor [C. F.] Aggregates are marketed in two sizes—the coarse (.295"—.100") for the finish course or topping and the fine (.100"—.0322") for surface treatment only.

Alundum Aggregates for terrazzo floors are marketed in four sizes and five colors.

NORTON COMPANY, WORCESTER, MASS.
New York Chicago Detroit Philadelphia Pittsburgh Hamilton, Ont.

T-175



# NORTON FLOORS

# We advertise this way to your clients —



### How a Canadian Guide's story sold a roof-

there," concluded Ed, the guide. "1600 people-every soul in Iroquois Falls. fire roared outside like big rapids. Nothing left next day but black ashes where we crowded. That was 10 years ago—July 29th, 1916."

Ten days later the two fishermen left Ed and the woods-headed for the States. Two hours wait for a train in Iroquois Falls-plenty of time to look over the power house of Ed's story.

They found a steel and concrete structure covered with a Barrett Specification Roof-found that this roof 10 years after its ordeal by fire was still in perfect condition, had never cost one cent for repairs or maintenance.

"Which," said one of the fishermen, dryly, as they walked toward the station, "pretty much settles the kind of roof we'll have on our new plant."

An exceptional test, yes! But not exceptional that the Barrett Specifica-tion Roof stood up under it. The firesafe qualities of these roofs are acknowledged. As the building world knows they take the base rate of fire insurance. But this is not the quality that makes them stand out.

For service records on file testify that many Barrett Roofs of this type, built 35, 40 and more years ago, are still absolutely weather-tight-and not a cent spent on them for maintenance.

Barrett Specification Roofs are guaranteed by a Surety Bond against repair or maintenance expense for a full

You're interested? Then dictate a brief memo to The Barrett Company, 40 Rector Street, New York City. We'll give you the full story-promptly.

Of course, you might, for sound reasons, want a built-up roof constructed according to your own specification.

Even so, don't neglect this fact: the experience of leading architects and builders over a period of more than 60 years have shown that it pays to construct a built-up roof of pitch and felt -both labeled Barrett.

\*The facts back of this story: In the summer of 1916 a forest fire swept 650 square miles of Ontario forests. At Iroquois Falls the population took refuge in the plant of the Abitibi Pulp & Paper Co.—reinforced concrete structure with a Barrett Specification Roof.

Raging fire surrounded this building for 9 hours—the air full of flying embers driven by a sixty mile wind. Building and roof were unharmed. The roof today is in perfect condition.

Barrett SPECIFICATION ROOFS

# - and here's something else of importance to you!

Many roof troubles, as you know, are due to faulty flashings - which have caused trouble for the architect and hurt the reputation of many a well-constructed roof.

Realizing this fact, we developed some years ago, after long study and experiment, a system of flashings that is posi-tively dependable. Time and the experience of leading architects in all sections of the country have proved that Barrett Flashing Block and Barrett Flashing Form, in combination with Barrett Flashings, over-come all the difficulties of flashing construction.

This Flashing System provides these all-important things:

- 1—A durable, water-tight con-nection between the roof and the parapet wall;
- 2-A flashing that provides for expansion and contraction, settlement or shrinkage;
- 3—Ease of installation;
- 4-A moderate cost with entire freedom from upkeep expense.

Barrett Flashings, installed in Barrett Flashing Block and Barrett Flashing Form, are guaranteed for ten years when used with Barrett Specification Bonded Roofs. (While not guaranteed when used with other roofings, these flashings are adapted to every type of bituminous flat roof work.)

Volume 3 of our Architects & Engineers Built-Up Roofing Reference Series gives detailed description of this roof flash-ing system. If not already in your files, a brief note to our Built-Up Roof Department (address below) will bring you a free copy.

THE BARRETT COMPANY 40 Rector Street, New York City IN CANADA: The Barrett Company, Limited 2021 St. Hubert Street, Montreal, Quebec

Illustrated

Color Wheel.

# Sheet Metal Work that Resists Rust!

The destructive enemy of sheet metal is rust. It is successfully combated by the use of protective coatings, or by scientific alloying to resist corrosion. Well made steel alloyed with Copper will last longest. Insist upon

Rust-Resisting Copper Steel

AND ROOFING TIN



Add safety to satisfaction, with full protection from fire, lightning, and weather. Keystone Copper Steel gives superior service for roofing, siding, gutters, spouting, flashings, metal lath, tanks, culverts, and all uses to which sheet metal is adapted. Look for the Keystone included in brands. We manufacture American Bessemer, American Open Hearth, and Keystone Copper Steel Sheets and Tin Plates for every requirement of particular architects, builders, and property owners.

Black Sheets for all purposes Apollo Best Bloom Galvanized Sheets Apollo-Keystone Galvanized Sheets Formed Roofing and Siding Products High Grade Roofing Tin Plates Fire Door Stock, Long Ternes Bright Tin Plates, Black Plate, Etc.

APOLLO-KEYSTONE Galvanized Sheets give increased service and added permanence to your building construction. These are unqestionably the highest quality sheets produced for galvanized sheet metal work.

KEYSTONE COPPER STEEL Roofing Tin Plates make clean, safe, attractive and satisfactory roofs. Supplied in grades up to 40 pounds coating — specially adapted to residences and public buildings. Metal roofs may be painted to harmonize with the color scheme of the building — an important feature which is often overlooked. Keystone quality products are sold by leading metal merchants, and are used by first-class roofers and sheet metal workers. Write for interesting booklets.

#### American Sheet and Tin Plate Company General Offices: Frick Building, Pittsburgh, Pa.

Chicago Cincinnati Denver Detroit New Orleans New York
Philadelphia Pittsburgh St. Louis
Pacific Coast Representatives: UNITED STATES STEEL PRODUCTS Co., San Francisco
Los Angeles Portland Seattle
Export Representatives: UNITED STATES STEEL PRODUCTS COMPANY, New York City

#### The Munsell System Assures a

Harmonious Roof

Ruberoid Giant-shingles afford you opportunity for perfect blending of colors. By using them in tapestry effects, you can obtain a roof in absolute harmony with the architectural style you choose as well as with the scenic surroundings.

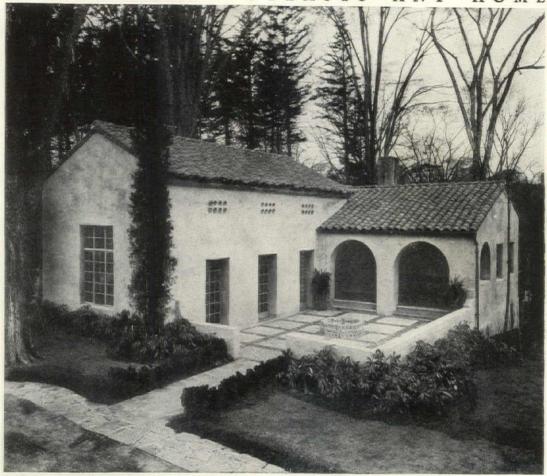
This advance assurance of roof harmony is made possible by The Munsell System of Color Notation. We will gladly furnish interested architects and builders charts showing Ruberoid tapestry effects that meet various architectural requirements.

> The RUBEROID Co. Executive Offices: New York

Giant-shingles



TILE ROOF OUTLASTS ANY HOME



Office Building at Fox Meadows Estate, Scarsdale, N. Y. Andrew J. Thomas, Architect

# The Crowning Touch of Beauty

Distinction in architecture is given the crowning touch by IMPERIAL Roofing Tiles. Craftsmanship has no finer expression than that seen in such an aristocratic roof.

In the example shown above, the handmade IMPERIAL covers are laid irregularly, giving a rare, Old-World effect. And IMPERIAL Roofing Tiles are suitable for all types of homes, estates.

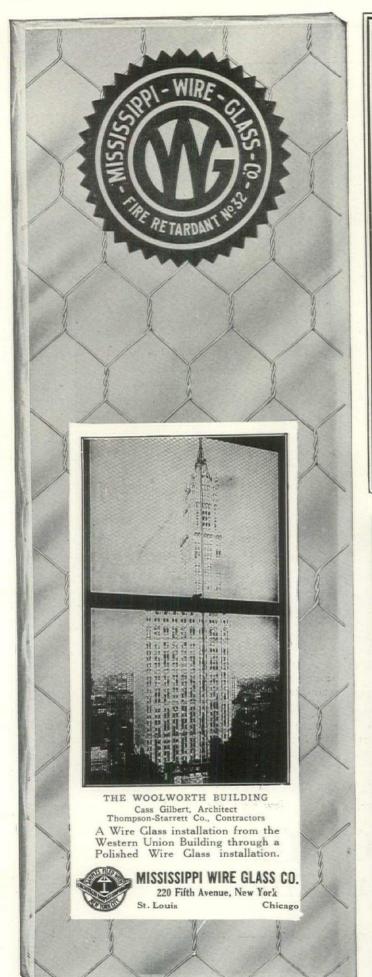
They keep homes cooler in summer and warmer in winter, thus reducing heating costs. Lower insurance rates are obtainable because they are perfectly fireproof and they retain their fine color forever without a cent of upkeep.

In home planning and building, therefore, it is well to remember that these tiles add just as they enhance the structures on great many times their cost to the sales value of the building.

LUDOWICI-CELADON COMPANY Chicago, 104 South Michigan Ave. • New York, 565 Fifth Ave.

Roofing Tiles





### Specification Data of hardware for Wood and Metal Casements

Send for a free copy today!

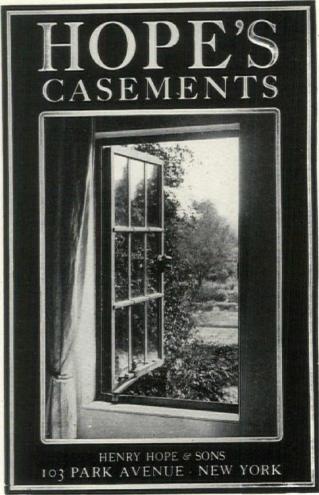
Covers the subject concisely but completely. Special notes on the variations of different makes. Can be copied word for word, saving much time, eliminating possible mistakes. Mailed upon request to architects, builders, contractors and realtors. Just send a postal to:

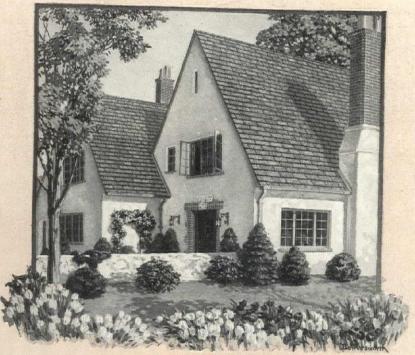


#### The Casement Hardware Co.

404A North Wood Street CHICAGO

CASEMENT HARDWARE HEADQUARTERS





# ONE THIRD THICKER than a standard No.1 slate shingle

THE Massive Weight Preston Shingle is much thicker than any other slate-surfaced asphalt shingle on the market. It is one-third thicker than a standard No. 1 slate shingle.

The unusual thickness of the Massive Weight creates the definite shadow line that architects demand. Hence this roofing lends an impressive tone of distinctiveness to any house. Not only does the extra thickness of these shingles contribute an important architectural feature, but it adds many years to the life of the roof.

The striking colors of these shingles are produced by the natural tints of the slate and stone particles with which they are surfaced.

Preston Shingles are made in two designs—Rectangular and Hexagonal, and in four colors— Red, Blue-Black, Green and Sunset. They are available in three weights—Heavy Standard, Extra Heavy and Massive.

We shall be glad to send you samples of Preston Roofing and an architect's file card. Write to Dept. D 20.



The wearing qualities of Preston Shingles are dependent not only on the quality but also on the quantity of asphalt which each shingle contains. If you examine the edge of a Preston Shingle you will notice that it is practically a solid body of asphalt. This feature of Preston Shingles accounts for their remarkable wearing qualities.

KEYSTONE ROOFING MANUFACTURING COMPANY
York, Pennsylvania

Preston ROOFING



# Firesafe Building Products

Endorsed by America's Leading Architects, Engineers, Contractors





GF Trussit has no equal for solid partitions. A concrete partition built up on this material is firesafe, durable and extremely rigid. It is a simple and rapid form of construction and is economical.

# GBSteel Joists for Light Occupancy Buildings

Cut time costs and make profitable savings in materials by using GF Steel Joists. They make a thoroughly dependable, rigid and firesafe floor construction at very low cost. and Builders/

WHEN you employ GF Building Products you are taking advantage of the finest engineering skill applied to problems of modern construction. The line of steel Building Products manufactured by GF represents the result of painstaking study of all the structural problems before the architect and builder. Each GF Product in turn stands as the solution to a perplexing problem in permanent, firesafe construction. You employ the factors of safety and economy whenever you use a GF Product.

A Copy of the Fireproofing Handbook sent free on request

#### Herringbone Rigid Metal Lath

GF Herringbone Rigid Metal Lath for walls, ceilings or stucco is a high quality construction you can give your customers at reasonable cost. GF Herringbone is beyond comparison.

### GFSelf-Sentering

GF Self-Sentering is designed to save time and money. It combines the form and reinforcement for concrete roofs and floors. It assures low cost, firesafe, permanent construction.

#### OTHER GF PRODUCTS

Steel Tile Duplex Steel Bridging Steel Channels Peds Key Lath
Corner Beads
Expanded Metal
Diamond Rib Lath

Steel Sash, Basement and
Casement Windows
Lintels
Industrial Steel Doors

Wire Mesh Concrete Reinforcement Waterproofing Compounds Road Forms

THE GENERAL FIREPROOFING BUILDING PRODUCTS, Youngstown, Ohio BRANCHES: New York Chicago Philadelphia Boston Cleveland Los Angeles St. Louis Omaha Kansas City Minneapolis Milwaukee San Francisco Portland, Oregon Pittsburgh Indianapolis Portland, Oregon

Export Dept.: 90 West Street, New York City. Cable Address: "Firegen-New York"





# This Metal Trim deserves your Endorsement

Have you seen our new Book on "Modern Mode, in Better Plastering"? It approaches the subject of metal lath construction from an entirely new angle—thirty-two pages, rich with suggestions—beautifully subtle in its recommendations—the finest piece of literature in the metal lath industry. If it isn't in your files now, by all means write for your Free copy. Show it to clients and prospects—it will help you self quality construction.



Members of the National Council for Better Plastering

CONOMY that must be paid for through sacrifice of architectural beauty and permanence is not the sort of economy you would dare to endorse. The price of some so-called economy is often beyond payment.

But when you can recommend to your clients an economy which greatly enhances the beauty, permanence, firesafeness and sanitary conditions of any type of building, you render a real service by doing so.

This is not mere theory—in all types of buildings, from homes to skyscrapers, Milcor "Expansion" Casings (Pat'd. June 13, 1922) have proved their superiority. They eliminate expensive wooden trim for door and window casings and insure safer, more beautiful, permanent, sanitary interiors.

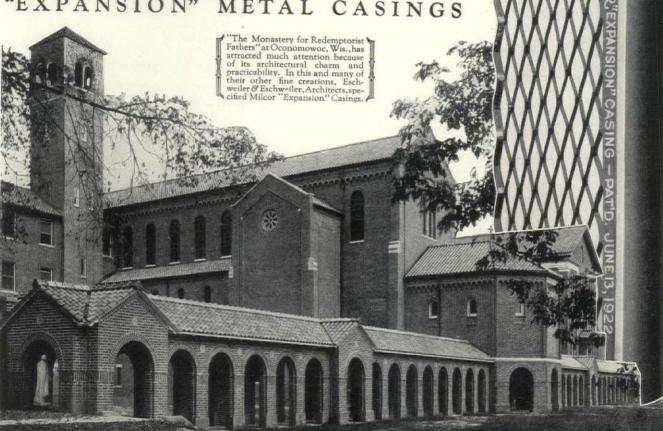
Specify this modern Milcor metal trim on one home or building. Then you will appreciate why many prominent architects so emphatically endorse "Expansion" Metal Casings. A well-known Kansas City Architect, for instance, wrote us this:

"We found Milcor "Expansion" Casing more economical than wood casing, and of neater appearance. It was of utmost importance that we plan this building for economy of upkeep and we feel that this metal trim offers the most pleasing solution of that problem".

Made in four styles of molding, from Galvanized Steel, ARMCO Ingot Iron, Pure Zinc or Copper. Samples on request.

MILWAUKEE CORRUGATING COMPANY, MILWAUKEE, WIS. CHICAGO, ILLINOIS KANSAS CITY, MO. LA CROSSE, WIS.

MILCOPS
"EXPANSION" METAL CASINGS







The Commodore Perry Hotel

Named for the illustrious Commander of the Erie fleet during the war of 1812 - - has installed

# Van Equipment for the Preparation & Serving of Food

and like the heroic endurance of Commodore Perry, Van Equipment was selected because of

# "That Enduring Quality"

for which it is famous. Famous for its sturdy construction and for the thought given to each individual installation for efficient service and arrangement for economy.

Our Engineering Department under the direction of men qualified in Hotel, Restaurant and Cafeteria Equipment layouts, will help you with any food serving question you may have without obligation on your part.

Write for our Catalog

#### I. A. HADLEY, Manager

Recent Contracts Obtained by VAN

Neil House

Columbus, Ohio

Fred Harvey System Union Station, Chicago, Ill.

Onion Station, Circugo, Inc.

Hollenden Hotel Cleveland, Ohio

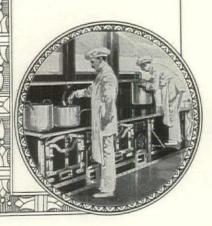
Ambassador Hotel Palm Beach, Florida

Columbus Hotel

Miami, Florida

Atlanta Athletic Club Atlanta, Ga

Atlanta, G



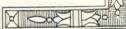
# The John Van Range @

QUIPMENT FOR THE PREPARATION AND SERVING OF FO

KANSAS CITY NEW ORLEANS CLEVELAND ATLANTA

BUFFALO

CHICAGO LOUISVILLE DETROIT PITTSBURGH





Moreland Courts Apartments, Shaker Heights, Cleveland, O. Owners: Shaker Company. Architect: A.L. Harris, Cleveland. Builders: Craig-Curtiss Company, also of Cleveland.

Below: Views of representative kitchens, showing Dangler and New Process Gas Ranges with Lorain Oven Heat Regulators.

Don't Slight the Kitchen

TENANT-SATISFACTION often depends upon the equipment furnished in apartment kitchens. That is why the keen-sighted business men, responsible for the success of the finest apartment-building projects, are specifying Gas Ranges with Lorain Oven Heat Regulators.

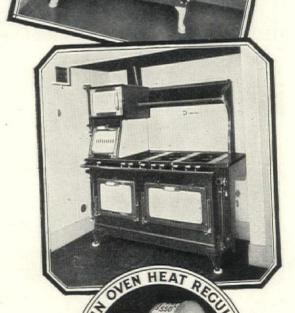
These men realize that millions of women see the advertisements of the Lorain in their favorite magazines every month. They know that women recognize the Red Wheel as a mark of superior quality and service—a guarantee of easier, better cooking and smooth-running kitchen affairs.

The Lorain Oven Heat Regulator measures the oven heat. After the Red Wheel is set, the Regulator automatically maintains the desired temperature for any length of time. Foods cooked by measured temperatures need no watching. The Lorain Self-regulating Oven saves time for maids and home managers, and assures uniformly perfect results with all oven cooking.

Lorain is the original oven heat regulator, used in more than 1800 schools and colleges to teach domestic science. It is the only oven regulator with a long compounding lever. It reacts quickly to the slightest change of oven temperature, thus insuring even oven heat control without excessive fluctuation.

To women who know the little Red Wheel, there is no "just-as-good" Gas Range. When they come to inspect suites in new apartment buildings, they look for the Lorain Red Wheel, found only on the following six famous makes of Gas Ranges: Clark Jewel, Dangler, Direct Action, New Process, Quick Meal, Reliable.

Gas Ranges with Lorain Self-regulating Ovens are made in sizes, styles and finishes suitable for use in homes, schools, hospitals, church and lodge kitchens—in fact, any building where cooking is to be done. For additional information, see 20th edition, Sweet's Catalog, Pages 2769-2778 or send for our Handbook on Gas Ranges for Architects and Builders.



One easy turn of the Lorain Red Wheel gives the housewife a choice of any measured and controlled oven heat for any kind of oven cooking or baking.

> Unless the Regulator has a RED WHEEL it is NOT a LORAIN

OR THE RED

### AMERICAN STOVE COMPANY

Largest Makers of Gas Ranges in the World

444 Chouteau Avenue

St. Louis, Mo.

LORAIN OVEN REGULATOR



## Greater-than-pantry convenience with no waste of space!



Eliminating every need for a pantry, providing all the working and storage space a woman needs, compact, convenient, beautiful-right in step with modern building trends-Kitchen Maid Units represent an important

advance in kitchen equipment.

These units include everything from kitchen cabinet and linen cupboards to Pulmanook and refrigerator, from dish and broom closets to folding ironing boards and kitchen gas range. Each unit is complete in itself; it can be used alone or in combination with other units.

Every woman appreciates instantly the exceptional beauty and convenience as well as the sanitary rounded inside corners, smooth doors, cereal set and other advantages of Kitchen Maid Units. Yet these units cost no more installed than old-fashioned cupboards.

Mail the coupon for full information, including dimensional drawings and prices.

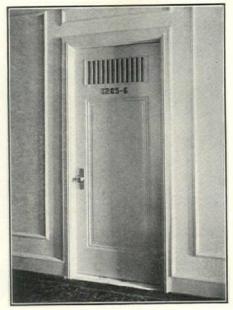
#### WASMUTH-ENDICOTT COMPANY 1808 Snowden Street, Andrews, Indiana



The Pulmanook Consists of table and two or four chairs. Folds easily and quickly into wall



WASMUTH-ENDICOTT CO. 1808 Snowden St. Andrews, Ind.
If in Canada, Address Branch Office, Waterloo, Ont. Please send catalogue and full information about Kitchen Maid Units to: Address .

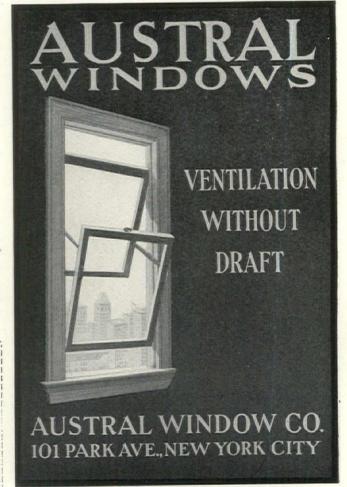


The Ventadoor Ventilating Panel for Doors

DEADENS SOUND AND EXCLUDES UNWANTED LIGHT

CORPORATION

155 EAST 42ND ST. NEW YORK CITY





A New-Style Kitchen as Arranged by Mann & MacNeille-Architects

### A NEW NOTE IN KITCHEN STYLE SINGS OUT

No longer the humdrum monotone of glaring white. No longer the discordant screech of angular shapes. A new note; a new rythm; a new symmetry of line sings forth. Vanished, has the sprawling, clumsy, old-fashioned range. Its corners, its angles, its box-like oven—Gone! Instead, now, the new Smoothtop Gas Range. Smooth, flat top. Straight, console lines. Built-in oven. Smoothtop fits in with other kitchen units. Carries out room lines. And, Smoothtop requires far less floor

space—yet provides far greater cooking surface. Its oven cuts off no light—for it has been lowered to convenient, table-drawer level...The result? Better planning. Better lighting. Simplicity of line. Harmony. Rythm...Yes, a distinctly new style in kitchens has been born—inspired by the new Smoothtop Gas Range. Would you know more of this new style? Study it? Send for the book couponed below. It shows six new-style kitchens as planned by six prominent architects.

If you are not served with City gas, write us for information about portable gas service maintained by a nationally known producer of compressed gases. It is adapted specially for use with Vulcan Smoothtops. Standard Gas Equipment Corp., 18 E. 41st St., New York City.



GAS KANGE

WITH SUPER VULCAN BURNERS

There is only one Smoothtop, a Vulcan product. It is fully protected by patents in United States, Canada & Great Britain

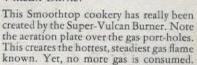
STANDARD GAS EQUIPMENT CORPORATION—VULCAN DIVISION



#### An Entirely New Cookery Better—Easier

It revolutionizes cookery, too—this new Smoothtop Gas Range. Stews, soups, pot roasts are done by a new, savory simmering. Vegetables are finished with the new speed cooking; it retains all their precious mineral salts and vitamins. Entire meals kept hot till time to serve. All this with farless watching, less fussing, less cleaning.

#### Super Vulcan Burner





#### 4 Cooking Zones

Each burner heats 4 distinct cooking zones. Speed, Boiling, Simmering, Warming. All without regulating the gas-jet. You cook with a graduated hot-plate. It's wonderful.

#### Oven Heat Regulator

75% of all cooking is done top-stove. But Smoothtop's equipment is complete, even to the little control wheel which gives oven heat regulation.

#### "How to Plan the New-Style Kitchen"

Contains beautiful full color illustrations of 6 newstyle kitchens, as planned by 6 leading architects. Tells how to achieve the new kitchen smartness, how to improve spacing, placing and lighting, 10c in stamps.

#### "Smoothtop Cookery"

is a cook book with a new viewpoint. Solves meal planning and work planning. Shows how to do more cooking with less trouble; how to use "lettovers" and still have more delicious meals. Edited by Sarah Field Splint. 25c in stamps.

Please check the coupon, and mail

STANDARD GAS EQUIPMENT CORP.

18 E. 41st St., New York

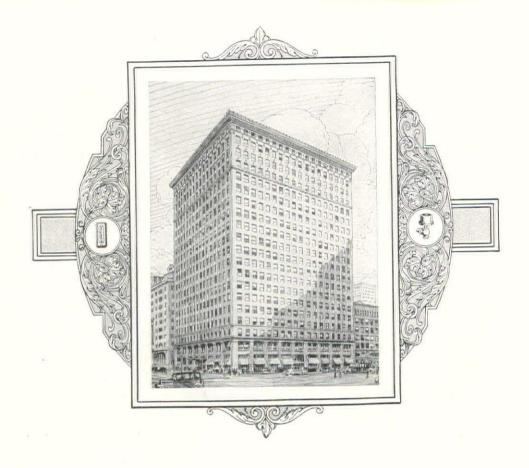
Please send me the books checked. I enclose stamps in amount required for each book checked.

"The New-Style Kitchen", 10c 
"Smoothtop Cookery", 25c 
"The Book of Smoothtop Gas Ranges", 
[Free]

Name ......o

Address

This advertisement appears in full color in the July 1926 issue of House & Garden and August House Beautiful



Nearly half a century is a long time to be successful, and ample time for demonstrated proof of a product's value and efficiency. The Johnson System Of Temperature And Humidity Control has been functioning in homes, schools, hospitals, business, civic and institutional buildings since 1885: and today is marked as totally successful, and the utmostly preferred system of temperature and humidity regulation to install.

### JOHNSON SERVICE COMPANY

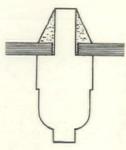
MAIN OFFICE & FACTORY, MILWAUKEE, WISCONSIN AUTOMATIC TEMPERATURE REGULATION SINCE 1885 TWENTY-NINE BRANCHES, UNITED STATES & CANADA

# JOHNSON SYSTEM OF TEMPERATURE AND HUMIDITY CONTROL

The All Metal System: And Designed, Manufactured, Installed Solely And Entirely By Johnson Engineers And Mechanics: Assuring Thoroughly Correct, Reliable Results Permanently.



Johnson Dual or Two Temperature Thermostat: one temperature for occupied rooms, another temperature for unoccupied rooms day or night. Write for details of this Johnson advantage.



One of those little things that make the living room in Mr. Child's home beautiful in detail as well as in general design and proportions is the character of the moldings in the casement sash. If the photograph were larger you could see that each thin division bar between the panes of glass is delicately molded. The drawing above is a cross-section of a muntin. or division bar, and shows the exact shape of this molding. All Curtis Woodwork shows care in such matters.



Curtis Casement sash, in the living room of the home of Mr. Edward T. Child, in Larchmont, N. Y.; Aymar Embury II, architect; The New Rochelle Coal and Lumber Company, New Rochelle, N. Y., dealers.

# So much beauty is due to woodwork alone!

That is why some architects are able to build a wealth of beauty for very little money, into the homes of their clients

ASK the average woman what she nishings. It was because the manufacturers of Curtis Woodwork realized a room and the chances are she will mention rugs, furniture, curtains and antiques long before she includes doors, windows, trim and other woodwork or architectural details.

It is only when the architect points out that it is the architectural background of a house which makes it beautiful regardless of movable furnishings, that the average client begins to appreciate the service the architect renders for his fee.

What house designed by an Aymar Embury II or any other good architect is not capable of standing by itself, empty, if need be, and proclaiming its own intrinsic beauty? Such a house is

homelike

with even

the most modest fur-

the importance of woodwork to both the architecture and furnishings of a house, that they went to the architectural profession for help in detailing Curtis designs.

The result is woodwork that architects of highest standing are glad to use in their residential work. An example is shown above, with a detail of the sash muntin.

This attention to design is seen in all Curtis Woodwork-doors, windows, trim, exterior moldings, stair parts, cabinetwork.

And Curtis designs are offered in such variety that no matter in what architectural styles you are working, you can use Curtis standardized woodwork to both your own and your clients' advantage.

Confine your selections to Curtis designs, sizes and woods (consult the Curtis dealer on this important point). Then there will be no errors in production, and no delays so common with made-to-order millwork.

Go see some Curtis Woodwork and judge for yourself. The leading dealer in woodwork in your town (if your work is east of the Rockies) probably handles the line and has some in stock or on display. He will also supply you with a Curtis Catalog from which you can select the designs and sizes to fit your plans.

The Curtis Companies Service Bureau 459 Curtis Bldg., Clinton, Iowa

459 Curtis Blag., Cintion, Iowa
Curtis & Yale Co., Wausau, Wisconsin; Curtis Sash &
Door Co., Sioux City, Iowa: Curtis Detroit Co., Detroit,
Michigan; Curtis Bros. & Co., Clinton, Iowa; Curtis
Door & Sash Co., Chicago, Illinois; Curtis, Towle &
Paine Co., Lincoln, Nebraska; Curtis, Towle & Paine
Co., Topeka, Kansas; Curtis-Yale-Holland Co., Minneapolis, Minnesota; Curtis Companies, Inc., Clinton, Ia.
Eastern Sales Office: 25 W. 44th St., New York City.
Curtis Companies Incorporated, Clinton, Iowa

d DOORS · WINDOWS FRAMES · BUILT-IN CABINETWORK



meets the utmost demands of architect and client for interior woodwork of enduring elegance and stability. Its nearly mar-proof hardness assures that happy fact.

In beauty, birch interior trim, doors and paneling compare favorably with the most costly imported cabinet woods.



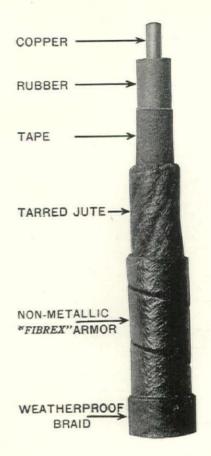
Its adaptability to a wide range of finishes — natural, any stain desired, or under enamel, makes Northern birch a preferred trimwood for any type of building. birch rotary-cut veneers are practicable, as they resist all tendency to check, so common with most woods. And, the beauty of birch floors is fully matched by their serviceability.

For further data, see Sweet's Catalog; also write for "Beautiful Birch" brochure with valuable table of Physical Properties of all American Hardwoods

THE BIRCH MANUFACTURERS
205 F. R. A. Building Oshkosh, Wisconsin

"Beautiful Birch for Beautiful Woodwork"

# Fibrex Tree Wire



FIBREX Tree Wire successfully withstands the most severe storms because long years of wear are built into every foot. FIBREX installations, properly made, are practically permanent.

The rubber insulated copper conductor, protected by successive layers of tape, tarred jute, non-metallic FIBREX armor and a wear resisting weather-proof braid, enable FIBREX to stand the test of time.

You can be certain that when your men handle FIBREX in wet weather they will be protected, because the fibrous, non-metallic, non-inductive armor cannot become charged.

Power and lighting companies find FIBREX the ideal tree wire because it eliminates swinging grounds and leakage which are always dangerous and interfere with uniform voltage.

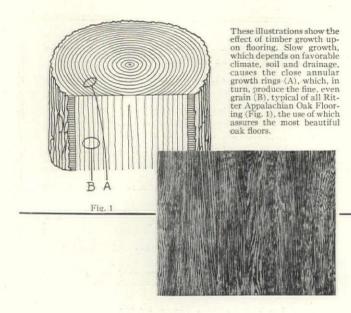
FIBREX can be spliced into the line easily with ordinary tools. No special materials are necessary.

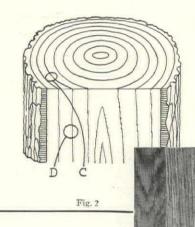
Get a piece of FIBREX and examine it. Sent promptly on request.

# SIMPLEX WIRE & CABLE @

MANUFACTURERS

201 DEVONSHIRE ST., BOSTON
CHICAGO SAN FRANCISCO NEW YORK
CLEVELAND SAINT AUGUSTINE





On the other hand, fast growing Oak results in the wide annular growth rings (C), which, in turn, produce the coarse grain (D). Figure 2 illustrates a panel of flooring made of rapid growing Oak. Such flooring lacks the elegance and charm characteristic of Ritter Appalachian Oak Flooring which is manufactured exclusively from slow growing Appalachian Highland Oak timber.

# Fine grain and even texture are essentials of beauty in Oak floors

SLOW growth of the timber from which Ritter Oak Flooring is manufactured is the basis of its fine grain and uniform texture, qualities so necessary in obtaining beauty and elegance in the finished floor.

The climate, soil and drainage of the Appalachian Highlands favor slow tree growth, which produces the close annular growth rings (A).

These rings, in turn, produce the fine, even grain and uniform texture indicated by the lines (B), typical of all Ritter Oak Flooring, Figure 1, which is manufactured exclusively from Oak timber grown on the well-drained slopes of the Appalachian Mountains.

On the other hand, fast growing Oak causes the wide annular growth rings (C), which, in turn, produce the coarse grain (D). Figure 2 shows flooring made from rapid

growing Oak, lacking the dignity and elegance characteristic of Ritter Appalachian Highland Oak Flooring.

In the Standard Rules for Grading Oak Flooring, no consideration is given to grain and texture; therefore, to be certain of getting the most beautiful Oak floors obtainable, many architects specify "Ritter Appalachian Highland Oak Flooring." For ready identification every piece is branded on the back, "W. M. Ritter Lbr. Co."



Superiority of timber, perfection of manufacture and grading, substantial economies in laying, nailing and finishing, are additional reasons for specifying Ritter Oak Flooring.

Complete information on Oak flooring will be sent free on request to architects interested in obtaining the utmost beauty in Oak floors.

#### W. M. RITTER LUMBER COMPANY

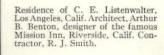
Appalachian Lumbermen since 1890 General Offices: Columbus, Ohio

The same excellent qualities which are so characteristic of Ritter Appalachian Highland Oak Flooring also make Ritter Appalachian Oak Lumber superior for interior trim.

Some California homes in which Ritter Oak Flooring was used.

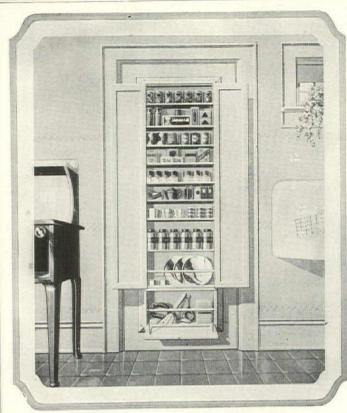


Residence of George Spain, Los Angeles, Calif. Architect, Myron J. King. Contractor, Harry Weenick





Residence of W. G. Talbot, Brentwood Park, Calif. Architect, George Ritchie. Contractor, T. H. Walker



The working tools of the housewife should be easily accessible. How convenient it is to have a place within arm's reach of the stove and sink for the kitchen utensils, etc., used in the preparation of meals. This cabinet takes the place of the always unsightly kitchen shelf, is sanitary, and up off the floor and therefore does not interfere with the daily cleaning.

#### PAINE HANGING CLOSET

Need Economy of space is demanded in all types of modern constructed homes, apartments, hotels and other buildings. Full advantage must be taken of all the conveniences to insure easy and efficient operation, especially during the present day servant problem.

The Paine Hanging Closet solves the problem of sufficient closet and storage room and utilizes space not ordinarily used.

Purpose The Paine Hanging Closet is an all-purpose cabinet and can be used to equal advantage in the Kitchen, Bathroom, Bedroom or Den, This cabinet will lessen steps and work and assist in the ease and efficiency of operation of the household to an extent comparable to the vacuum cleaner and the other modern conveniences.

Construction This cabinet is made in one size:
The back is a three-ply panel. It is attached with a hanging moulding that is nailed to cabinet and screwed to wall. For 2-4 doors and narrower, moulding is applied only to the top and bottom of closet.

Specifications It is made of Basswood, one of the light-count of its light weight can be hung or attached where de-sired. Basswood has a fine, tight grain and soft texture, takes paint and enamel perfectly and accepts and retains a smooth finish.

Facilities The Paine Hanging Closet is of strictly cabinet organization that controls their supply of Basswood and operates with facilities without a parallel in the woodworking industry. They have pioneered in introducing new designs of doors and interior finishings for the convenience of the home.

Value The sale or rentable value of a building is now very largely determined by the up-to-dateness not only of its design and arrangement but by the extent, location and type of the conveniences. A moderate investment in new and unusual features will bring returns many fold over their cost.

PAINE LUMBER COMPANY, Ltd. OSHKOSH, WISCONSIN

#### STABILIZED BY KOLL LOCK-JOINT COLUMNS



Booklet of Model En-



Hartmann-Sanders craftsmen have the facilities, experience and ideals required to properly execute all of the higher types of interior and exterior work.

Booklet of entrances, columns, or garden equipment-sent on request. Hartmann-Sanders Co. 2151 Elston Avenue, Chicago; Eastern Office and Showroom: 6 East 39th Street, New York City.

### HARTMANN-SANDERS

Rose Arbors Pergolas Colonial Entrances

Garden Equipment Koll Columns

### Engineering Counsel for Architects KEWANEE'S nationwide organization of

hydraulic-electric en-gineers will counsel any architect without charge.

KEWANEE men are not salesmen nor ex-plumbers, but trained experts in private water supply, electric light and sewage disposal. Back of them is the KEWANEE quarter century of technical and manufacturing experience and the KEWANEE line of over 200 private

utility systems.

We appreciate the architect's needs and problems. We are glad to help draft specifications for proper private utilities to fit the exact needs of each job-from country cottage to million dol-

lar club or estate.
FREE BOOK of Specifications.
Our complete architect's specification book contains a mass of engineering data and specifications on water supply, electric light and sewage disposal. You need it. Sent free. Write for it.

KEWANEE PRIVATE UTILITIES CO. 442 Franklin St., Kewanee, Ill.







# Douglas Fir Facts

#### Color and Texture

Douglas Fir varies little as to color and texture.

#### Strength

Douglas Fir is unsurpassed in strength and elastic limit in commercial softwoods.

#### Straight

Long-Bell Douglas Fir lumber and timbers are straight and free from crooks or kinks.

#### Heart Content

An average of 86 per cent of the pieces of Long-Bell Douglas Fir dimension and common boards are all heart and more than 78 per cent of the entire production is all heart.

#### Softest Fir Finish

Long-Bell forests contain a high percentage of large yellow Douglas Fir, which produces the softest fir finish, of great heart content and beautiful grain effects.

#### Trade-Marked

Long-Bell Douglas Fir lumber and timbers are trademarked as identification of unusual thoroughness in manufacture—plus more than fifty years' experience as lumbermen.

THE LONG-BELL LUMBER COMPANY R. A. LONG BLDG. Lumbermen since 1875 KANSAS CITY, MO.

# Long-Bell Warked L U M B E Ro

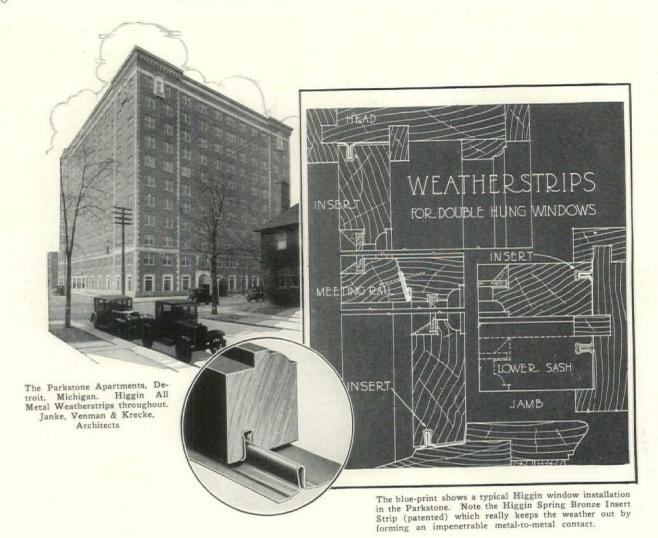
Douglas Fir Lumber and Timbers; Southern Pine Lumber and Timbers; Creosoted Lumber, Timbers, Posts, Poles, Ties, Guard-Rail Posts, Piling; Southern Hardwood Lumber and Timbers; Oak Flooring; California White Pine Lumber; Sash and Doors; Box Shooks.

KNOW THE LUMBER YOU BUY

## Use Long-Bell Oak Flooring

Builders find permanent satisfaction in Long-Bell tradeisfaction in Long-Bell trademarked oak flooring. Its excellence of manufacture makes it economical to lay and finish . . . a beautiful, durable floor.





# No Other Weatherstrip Has This Feature

The one outstanding feature that distinguishes the Higgin All Metal Weatherstrip is the self holding Spring Bronze Insert Strip dovetailed into the window sash. It is flexible and springlike, and therefore fits over the strip in the window frame like a glove. It keeps air currents from seeping through and makes protection from drafts a reality.

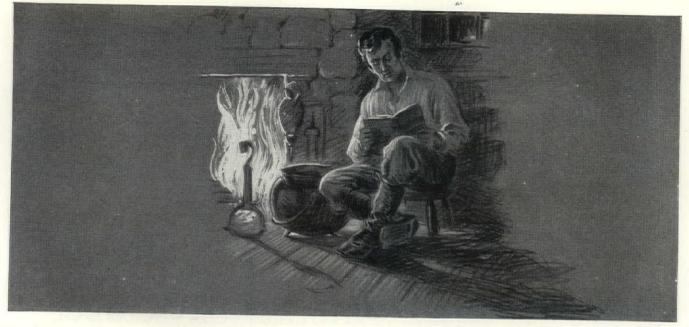
The installation shown above is one of the constantly increasing instances where the principle of the Insert Strip is winning out against all others.

Let the Higgin Man in your city show you how the Higgin All Metal Weatherstrip operates. Telephone him for a demonstration.

THE HIGGIN MFG. CO., Newport, Ky. and Toronto, Can.



Write for Higgin
Weatherstrip
and Screen
Drafting Room
Details.



# The torch of education is wired today!

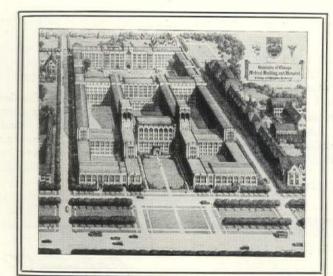
The handicaps of yesterday are not for our generation. The proverbial hearth light and log cabin have become mere historical symbols. Today educational and electrical facilities in America have outstripped the rest of the world—and the next 25 years will see even greater improvements.

Architects and engineers are meeting these future lighting and power needs in large educational institutions like the University of Chicago; by designing systems and "Triton," and "Driversity of comparison of the capacity of the capacity

specifying wires and cables that will insure against interrupted service and permit expansion beyond present needs.

Atlantic "Neptune" Wires were specified for the wiring in the magnificent new Chicago University medical building shown below. The three Atlantic grades—"Neptune," "Triton," and "Dolphin," are recognized as quality products of unequalled longevity. Samples and detailed specifications will gladly be sent upon request.

ATLANTIC INSULATED WIRE & CABLE COMPANY Rome, N. Y.





The Medical College at the University of Chicago, Coolidge & Hodgdom Architects; Battey & Kipp, Electrical Engineers; L. H. Lamont Co., Electrical Contractors.

ATLANTIC INSULATED WIRES AND CABLES



BANK OF AMERICA BLDG. NEW YORK

TROWBRIDGE & LIVINGSTON Architects

NOTE: The architects' drawing from which this cut was made shows swnings. These will be made unnecessary by the use of Athey Shades.)

# Another Skyscraper

Equipped With More Than 1000

# Mindow Shades

Many of the world's famous skyscrapers in New York and other cities have adopted Athey Shades because—in addition to their other ad-

vantages—they eliminate the expense and fire hazard of awnings. They do everything an awning can do, hence make them unnecessary. And their cost is considerably less than the cost of awnings alone.

#### Provide Perfect Ventilation

By raising the shades to the top and lowering to about 10" from the window stool, and lowering the upper sash about 10", the sun's rays superheat the air between the shade and the glass.

This superheated air must pass up and out above the sash, drawing the old air from the room and automatically providing ventilation.

#### Help Rent Space

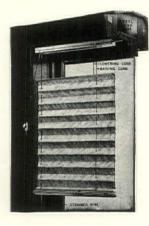
Even on a blazing hot day the rooms whose windows are equipped with Athey Shades have a cool and inviting effect. This effect is so noticeable that

building managers have told us it often helps them rent space.

#### Last So Many Years They Are Most Economical

There is nothing about Athey Shades to get out of order—no latches, catches, rollers or springs to slip, stick or break. The strained wires on which they run prevent them from rattling and tearing even when the wind is strong and the window is open.

Many installations have proved that they last so many years they actually are the most economical shades obtainable.



Athey Products



Perennial Window Shades Disappearing Partition Skylight Shades Cloth-Lined Metal Weatherstrips Athey Company

6058 West 65th Street - Chicago, Illinois In Canada: CRESSWELL-McINTOSH, Reg'd. 270 Seigneurs St., Montreal, Que.

# PIVOTED STEEL SASH

### Other types of Lupton Windows

### Projected Sash



First made by Lupton, this type of sash has met with constantly increasing popularity for factories, office buildings and schools. Easily operated ventilators stay open in any position. Made in Architectural and Industrial styles.

### Double-Hung



A practical, goodlooking, easy-moving windowfor office buildings, hotels and apartments. Weather-tightness is assured by the carefully designed construction of galvanized steel plate. Low cost is due to quantity production.

### Counterbalanced



These windows make balanced ventilation automatic. When the lower sash is opened, the upper sash lowers an equal distance, thus providing an entrance for fresh air and an exit for exhausted air at the same time.

#### Pond Continuous Sash



This sash forms a transparent, weather-protecting shelter over a continuous opening, and gives remarkable efficiency in the natural lighting and wentilation of industrial buildings. Long "runs" are readily controlled by Pond Operating Device.

# Pond Operating Device



For the efficient operation of top-hung sash or large groups of pivoted ventilators. Pond Operating Device has no equal. It gives the maximum amount of opening. Its freedom from useless stresses and friction give it a long life under difficult conditions of service. th hand-operated

Furnished in both hand-operated and motor-operated types.



IN business buildings, wherever there's place for a window, Lupton Pivoted Sash should be considered.

This widely-used Steel Sash freely admits the abundant daylight which encourages good work and increased production. It gives easily controlled, wholesome ventilation. And it's built to withstand the hardest knocks of time and use.

Carried in 25 stock sizes by dealers everywhere, Lupton Pivoted Sash is quickly purchased and easily installed. It's the universal window for business buildings, made easier to use by competent Lupton service. Write for catalogue 12-A.

#### DAVID LUPTON'S SONS COMPANY

2207 E. Allegheny Ave.

Philadelphia, Pa.

Atlanta Baltimore Boston Buffalo Chicago Clevelano Dallas

Los Angeles Newark New York Pittsburgh



LUPTON

STEEL WINDOWS EVERYWHERE

# Again CHAMBERLIN/ is given Preference



Stevens Hotel, Chicago, Ill., Holabird & Roche, Architects; Geo. A. Fuller, Contractors. 3000 rooms. World's largest hotel project put under way in 1925—Chamberlin equipped throughout—90,000 ft. of Chamberlin Metal Weather Strip

REFERENCE for Chamberlin by leading architects and builders has become almost an invariable rule. The magnificent Stevens Hotel at Chicago furnishes another typical case in point. Preference for Chamberlin is based on the most substantial foundation. For 33 years, Chamberlin, the original metal weather strip, has maintained its position as the accepted standard. For 33 years Chamberlin has constantly pioneered new developments in the art and has made the name Chamberlin synonymous with the best and most advanced in weather stripping. Chamberlin manufactures its weather strips, installs them, and guarantees and services them for the life of the building. Furthermore, Chamberlin maintains a nation-wide service organization to relieve architects and builders of all weather stripping details and responsibility. Technical data furnished on request.

Write for Chamberlin Literature

CHAMBERLIN METAL WEATHER STRIP CO.
West Lafayette Blvd., Detroit, Michigan

100 Sales and Service Branches throughout the United States



### Ten Reasons Why

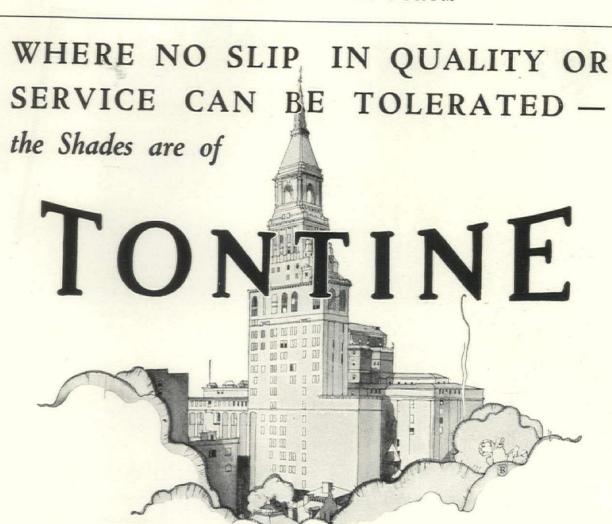
- 1 Completeness of Line.
- 2 Highest Quality of Ma-
- 3 All Installations by Chamberlin's Own Trained Craftsmen.
- 4 Most exacting Attention to details.
- 5 Best by Test of Time.
- 6 Excels through Basic Improvements.
- 7 Ranked as the Standard for thirty-three years.
- 8 Leader in Weather Strip Development.
- 9 Installation Guaranteed for Life of Building.
- 10 Nation Wide Service Organization.

CHAMBERLIN
METAL WEATHER STRIP CO.
West Lafayette Blvd., Detroit, Mich.
Please send copy of your new detail book, also copy of illustrated booklet.

Name

Address

City
State



WINDOW SHADES of du Pont TONTINE are used in the building of the Travelers' Life Insurance Company of Hartford, Connecticut. The number of famous office buildings similarly equipped is growing continually.

This preference is easily explained. Shades of du Pont TONTINE are made on a unique principle—the fabric is impregnated with Pyroxylin. Consequently, shades of TONTINE do not fade nor fray. They do not check nor crack. And they can be washed clean with soap, water and a scrubbing brush.

The economic aspect of this is significant. Du Pont TONTINE puts an end to the constant replacement expense inseparably linked with old-fashioned, perishable window shades.



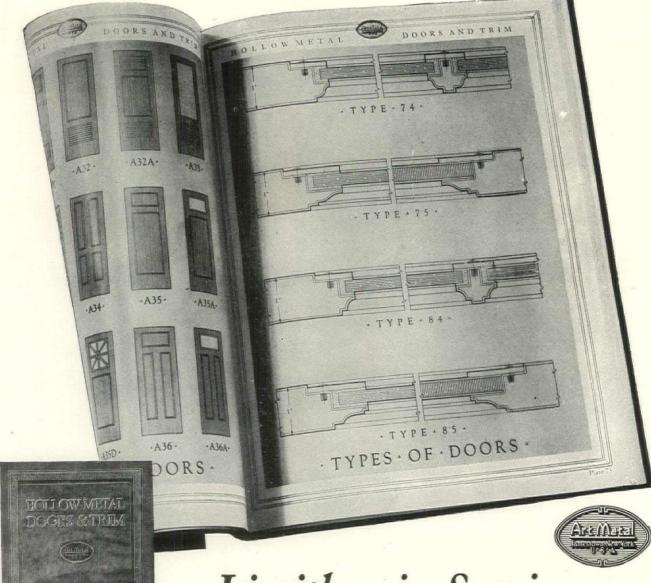
Special data and testing samples are available for architects and builders. Your correspondence is invited.

# WASHABLE TONTINE

WINDOW SHADE CLOTH

#### Important!

Shades of du Pont Tontine have been chosen for use in the 360 model homes now being built throughout the United States under the auspices of the Home Owners' Service Institute.



ART METAL places at the disposal of architects and builders the experience of a third of a century in the designing and execution of interior equipment in metal. Many of the finest of modern buildings are equipped throughout with Art Metal Doors, Trim, etc. A number of these installations are illustrated in the Art Metal Hollow Metal Catalog.

# Limitless in Service

TO both the Architect and the Builder this factful Catalog of ART METAL Hollow Metal Doors and Trim presents an invaluable fund of information and suggestion applicable to every project requiring a hollow metal installation. Picturing representative ART METAL installations and a complete series of architectural detail plates, it furnishes data that invites constant and ready reference to its pages.

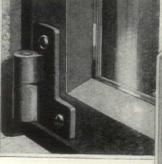
Limited in edition, the Art Metal Hollow Metal Catalog is available to executives only. A request for it on your letterhead will bring you your registered copy.



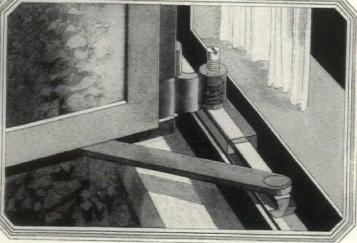
Hollow Metal Doors and Trim, Steel and Bronze Equipment for Banks, Libraries, Public Buildings, Steel Office Equipment, Safes and Files.

ART METAL CONSTRUCTION Co., JAMESTOWN, N. Y.





THORN CLEANING HINGE, WHEN CLOSED, HAS THE APPEARANCE OF THE ORDINARY BUTT HINGE.



adjusters.

tight under the worst conditions. During the warm weather any degree of ventilation can readily be had, as the Thorn cleaning hinge of solid bronze eliminates the troublesome sill

> Information on Request

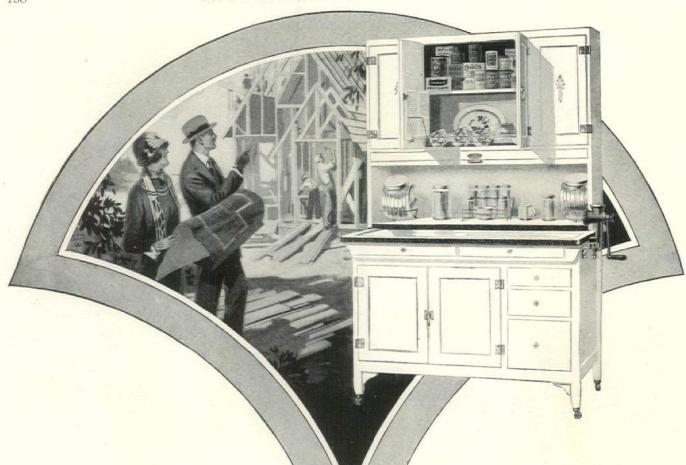
THORN CLEANING
HINGE HOLDS THE
LEAF SECURELY IN
ANY POSITION,
ELIMINATING SILL
ADJUSTERS. WHEN
OPEN, CLEANING
FROM THE INSIDE
IS AN EASY OPERATION.

J. S. THORN COMPANY

2009 W. ALLEGHENY AVE., PHILADELPHIA

Makers of





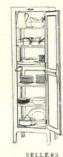
# A new booklet for the architect

To architects, builders and engineers, we are now ready to send an informative booklet dealing with some thoughtful facts concerning built-in cupboards and kitchen cabinets. It considers the planning of the modern kitchen in the light of new efficiency. A really important matter, for it affects the future direction and reach of the home building industry. Send to G. I. Sellers & Sons Company, Elwood, Indiana, for this carefully prepared booklet. It will be gladly sent upon request without cost or obligation.

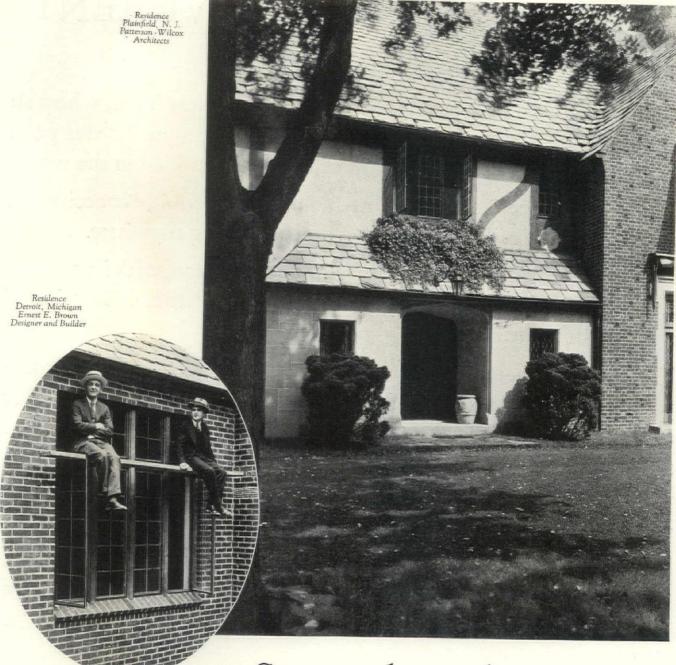
# Few whip-sockets are sold today

The first "horseless carriages" had whip-sockets. The old carriage builders had the habit strong. But it had to make way for a new order. In like manner some architects are still building elaborate and fixed cupboarding in modern homes; this in spite of the fact that the modern kitchen cabinet is cheaper, easier to install, and is much more convenient and sanitary, because it is movable. Combined with the Sellers utility closet, easily adaptable to varied arrangements, it better serves any cupboarding need.

# SELLERS KITCHEN CABINETS



SELLERS UTILITY CLOSET



This test dramatically illustrates the great strength and rigidity of Crittall Standardized Casements. Strong, solid bronze hinges with hardened steel pins support the weight of two men without the slightest strain or sagging. The frame, with perfectly welded corners, receives no support from the lead cames, but on the contrary must give them their foundation of rigidity to prevent injury to the leaded glass. The weight of two men produces no distortion and consequently no injury to the glass.

### CRITTALL Standardized Casements

# Strength and Beauty Quality and Price

Windows beautiful and fine enough for your most costly commission, and at a price that makes them suitable for the most modest home. In Crittall Standardized Casements architects can now use the finest window quality obtainable in an altogether new and low priced range of houses.

Typical of the perfection of detail found throughout is the handsome and substantial hardware used. You may have Crittall Standardized Casements either in outward or inward opening types. Both are *guaranteed* weathertight without the use of weather strips.

Our Catalog showing how easily these windows may be installed, screened and draped, will gladly be sent on request.

CRITTALL CASEMENT WINDOW COMPANY, Manufacturers
10975 HEARN AVENUE, DETROIT, MICHIGAN

# OUTSTANDING ACHIEVEMENTS



HERE is only one 277 Park Avenue, in New York, where an entire acre of garden in the heart of the city makes this great apartment structure the most unique of its kind in the world.

There is only one General Motors Building, in Detroit, "conceived in terms of the colossal", and the largest office building anywhere.

And there can be only one Produce District, in Chicago, with its creation making possible the removal of an entire industry from one section of the city to another.

These structures—great of their kind and great by any standard of comparison—are typical of the financing done by S. W. Straus & Co. For one, we underwrote a first mortgage bond issue of \$4,500,000; for the second, an issue of \$12,000,000 and for the third, an issue of \$8,000,000.

You will be interested in a recent publication of this House—*The Straus Plan of Financing*—in which are shown the photographs of typical Straus underwritings throughout the United States and in Canada, together with letters from owners, operators, architects and builders which speak for themselves. If you have a financing problem to solve, send for this book today. Address,

LOAN DEPARTMENT

# S.W. STRAUS & CO. Established 1882 Investment Bonds Incorporated

STRAUS BUILDING 565 Fifth Ave. at 46th St. New York Straus Building Michigan Ave. at Jackson Blvd. CHICAGO

STRAUS BUILDING
79 Post Street, SAN FRANCISCO

We are always interested in making loans of \$250,000 upward, either on completed buildings or structures to be built.

44 YEARS WITHOUT LOSS TO ANY INVESTOR

## Selected List of Manufacturers' Publications

FOR THE SERVICE OF ARCHITECTS, ENGINEERS, DECORATORS,

The publications listed in these columns are the most important of those issued by leading manufacturers identified with the building industry. They may be had without charge, unless otherwise noted, by applying on your business stationery to The Architectural Forum, 383 Madison Ave., New York, or the manufacturer direct, in which case kindly mention this publication.

#### ACOUSTICS

#### The Celotex Co., Chicago.

Acousti-Celotex. 16 pp., 8½ x 11 in. Illustrated brochure on a valuable material for facing walls and ceilings. Specifications and Details for application and decoration of Acousti-Celotex, 11 pp., 8½ x 11 in.

John-Manville, Inc., Madison Ave. & 41st St., New York, N. Y. Architectural Acoustics. Booklet. 6 x 9 in. 24 pp. Illustrated. Treatise on the correction of architectural acoustics in Churches, schools, hospitals, office buildings and other places.

#### ASH HOISTS-ELECTRIC AND HAND POWER

Gillis & Geoghegan, 544 West Broadway, New York, N. Y.
General Catalog. 8½ x 11 in. 20 pp. Fully illustrated. Contains specifications in two forms (with manufacturers' name and without). Detail ¼ in. scale for each telescopic model and special material-handling section.

The Man-Saving Load Lifter. 51/8 x 81/8 in. 8 pp. Illustrated. Describes G&G Telescopic and Non-Telescopic Hoists for handling material in factories.

#### BOILERS-See Heating Equipment

#### Acme Brick Company, Ft. Worth, Texas.

Series No. 1

Architectural designs rendered in Acme Brick. Booklet 11 x 8½ in. Illustrated. A series of 48 photogravures showing architectural designs rendered in Acme brick. Illustrations show the various types of buildings erected in the Southwest in recent years. Sent free to architects applying on their office stationery. stationery.

American Face Brick Association, 1751 Peoples Life Bldg., Chicago, Ill.

Chicago, Ill.

Architectural Details in Brickwork. Series One, Two and Three. Each series consists of an indexed folder case to fit standard vertical letter file, containing between 30 and 40 half-tones in brown ink on fine quality paper. These collections are inspiring aids to all designers. Sent free to architects who apply on their office stationery; to others, 50 cents for each series. Size 8½ x 11 in.

English Precedent for Modern Brickwork. A book of plates and measured drawings of Tudor and Gothic brickwork with a few recent variations of modern architects in the spirit of the old work. Price \$2.00. 100 pp. Illustrated. 8½ x 11 in.

Brickwork in Italy. 298 pages size 7½ x 10½ in., an attractive and useful volume on the history and use of brick in Italy from ancient to modern times, profusely illustrated with 69 line drawings, 300 half-tones, and 20 colored plates with a map of modern and XII century Italy. Bound in linen will be sent postpaid upon receipt of \$6.00. Half Morocco, seven dollars. dollars.

#### BUILDING FINANCE

11 111

#### S. W. Straus & Co., 565 Fifth Ave., New York, N. Y.

The Straus Plan of finance is an attractively prepared booklet of 30 pages 6 x 9 in. in size, which summarizes the plan under which S. W. Straus & Co. finance modern office building, apartment house, residential hotel and other types of construction. It is illustrated with sketches of buildings throughout the United States which secure bond issues purchased by S. W. Straus & Co. Straus & Co.

#### BUILDING STONE-See Stone, Building

#### BUILDING, STANDARD STEEL

Truscon Steel Company, 250 W. Lafayette Blvd., Detroit, Mich. Truscon Standard Building Catalog. 8½ x 11 in. 48 pp. Contains data and illustrations.

#### BUILDING, STEEL PRODUCTS FOR

#### Massillon Steel Joist Co., Canton, Ohio.

Massillon Steel Joist Co., Canton, Onio.

Massillon Bar Joists. Pamphlet. 8½ x 11 in. Illustrated. Information descriptive of Massillon Bar Joist Permanent Fireproof Floor and Roof Construction, with cuts of typical installations. See classification "Steel Joists" for other publications intended for the architect designing this construction.

Massillon Metal Lath. Pamphlet. 8½ x 11 in. Illustrated. Includes tabulations and illustrations covering recommendations for the use of various weights and kinds of metal lath and lath accessories.

accessories.

Massillon Roof Trusses. Pamphlet. 8½ x 11 in. 8 pp. Illustrated. Shows typical installations with 12 sizes of Standardized Curved Chord Steel Roof Trusses for spans of from 40 to 60 feet, together with details, dimensions, and safe loading

Massillon Bank Vault Reinforcing. Pamphlet. 8½ x 11 in. 8 pp. Illustrated. Gives details of typical installations for a line of standardized steel vault reinforcing frames.

Truscon Steel Company, 250 W. Lafayette Blvd., Detroit, Mich. Truscon Data Book. Catalog. 3½ x 6 in. 128 pp. Illustrated. Contains complete information with illustrations on Truscon reinforcing steel, steel windows, metal lath, standard buildings, concrete inserts, steel joists, pressed steel stamping and chemical products.

#### CEMENT

#### Carney Company, The, Mankato, Minn.

What Twelve Men Said About Carney. Booklet, 8½ x 11 ins., Illustrated. Opinions of well known architects and builders of Carney Cement used for mortar.

Louisville Cement Co., 315 Guthrie St., Louisville, Ky.

BRIXMENT for Perfect Mortar. Self-filing handbook 8½ x 11 inches. 16 pp. Illustrated. Contains complete technical description of BRIXMENT for brick, tile and stone masonry, specifications, data and tests.

#### CONCRETE COLORINGS

#### A. C. Horn Company, Long Island City, N. Y.

Keramic Catalog. Booklet. 8½ x 11 in. 26 pp. A magnificent brochure, illustrated in color, describing a valuable line of specialties for use with concrete floors—colorings, hardeners, waterproofing, etc.

#### CONDUIT

#### Johns-Manville, Inc., New York.

Orangeburg Fibre Conduit. Booklet. 8½ x 11 in. 8 pp. Details regarding a valuable form of conduit.

Orangeburg System of Under Floor Duct. Booklet. 8½ x 11 in.

32 pp.

National Metal Molding Co., 1113 Fulton Building, Pittsburgh, Pa. Bulletin of all National Metal Molding Products. In correspondence folder. 9½ x 11½ in.

Sheraduct. Circular. 5 x 8 in. Illustrated.

Flaxsteel. Circular. 5 x 8 in. Illustrated.

#### CONSTRUCTION, FIREPROOF

#### Massillon Steel Joist Co., Canton, Ohio.

Massillon Bar Joists. Pamphlet. 8½ x 11 in. 8 pp. Illustrated. Contains general information, with illustrations, regarding obtaining Permanent Fireproof Floor and Roof Construction by using Massillon Bar Joists. See classification "Steel Joists" for other publications intended for architects designing this for other p

construction.

Massillon Metal Lath. Pamphlet. 8½ x 11 in. 8 pp. Illustrated. Contains cuts, illustrations and recommendation for the use of various weights and kinds of metal lath for fireproofing columns, beams and steel joists.

National Fire Proofing Co., 250 Federal St., Pittsburgh, Pa. Standard Fire Proofing Bulletin 171. 8½ x 11 in. 32 pp. Illustrated. A treatise on fireproof floor construction.

Northwestern Expanded Metal Co., 1234 Old Colony Building, Chicago, Ill.

Northwestern Expanded Metal Products. Booklet. 8½ x 10¾ in. 16 pp. Fully illustrated, and describes different products of this company, such as Kno-burn metal lath, 20th Century Corrugated. Plaster-Sava and Longspan lath channels, etc.

#### DAMPPROOFING

Philip Carey Co., Lockland, Cincinnati, Ohio.

Architects' Specifications for Carey Built-Up Roofing. Booklet.

8 x 1034 in. 24 pp. Illustrated. Complete data to aid in specifying the different types of built-up roofing to suit the kind of roof construction to be covered.

Carey Built-Up Roofing for Modern School Buildings. Booklet.

8 x 1034 in. 32 pp. Illustrated. A study of school buildings of a number of different kinds and the roofing materials adapted for each.

for each.

A. C. Horn Company, Long Island City, N. Y.
Waterproofing. 9½ x 11½ in. Folder. Contains folders giving data on excellent waterproofing and dampproofing materials.

Sonneborn Sons, Inc., L., 116 Fifth Ave., New York.
Specification Sheet, 8½ x 11 in. Descriptions and specifications of compounds for dampproofing interior and exterior surfaces.

Toch Brothers, 110 East 42nd Street, New York City.

Specifications for Dampproofing, Waterproofing, Enameling and Technical Paint. Complete and authoritative directions for use of an important line of materials.

#### DOORS AND TRIM, METAL

The American Brass Company, Waterbury, Conn.

Illustrated pamphlet describing use and adaptability of Extruded Architectural Bronze Shapes for metal window frames, doors, grilles, counter screens, etc.

grilles, counter screens, etc.

Art Metal Construction Co., Jamestown, N. Y.

Hollow Metal Doors and Trim. Portfolio containing several brochures and a catalog of 159 pages and plates 85% x 11½ in.

The Compound & Pyrono Door Company, St. Joseph, Mich.
Pyrono Handbook for Architects and Contractors. 8½ x 11 in.

16 pp. Contains full information regarding Pyrono Fireproof Veneered Doors and Trim, with complete details and specifications.

Pyrono details in sheet form for tracing.

Richards-Wilcox Mfg. Co., Aurora, Ill.

Fire Doors and Hardware, Booklet. 8½ x 11 in. 64 pp. Illustrated. Describes entire line of tin-clad and corrugated fire doors, complete with automatic closers, track hangers and all the latest equipment—all approved and labeled by Underwriters' Laboratories.

### SELECTED LIST OF MANUFACTURERS' PUBLICATIONS—Continued from page 141

#### DUMBWAITERS

Sedgwick Machine Works, 151 West 15th St., New York.

Catalog and Service Sheets. Standard specifications, plans and prices for various types, etc. 4½ x 8½ in. 60 pp. Illustrated.

#### ELECTRICAL EQUIPMENT

Frank Adam Electric Company, St. Louis, Mo.
Catalog No. 35—1925. Panelboards—Steel Cabinets. 734 x 10½ in.
64 pp. Illustrates and describes sectionally built panelboards,
an important line of steel cabinets, and the fittings which go

with them.

Frink, Inc., I. P., 24th St. and 10th Ave., New York City.
Catalog 415. 8½ x 11 in. 46 pp. Photographs and scaled crosssections. Specialized bank lighting, screen and partition reflectors, double and single desk reflectors and Polaralite Signs.

Hart & Hegeman Mfg. Co., The, 342 Capitol Ave., Hartford, Conn.
The Line of Least Resistance. Catalog R. 10½ x 7½ in. 152 pp.
Illustrated. Complete display of switches, sockets, accessories
and wiring devices with brief description.
A new H & H Switch. Leaflet. 3½ x 6 in. 4 pp. Illustrated.
Illustrates a new H & H composition base push switch of De
Luxe quality.
Tumbler Switches. Booklet. 3½ x 6 in. 6 pp. Illustrated. Shows
complete line of H & H Tumbler Switches.
Architects' Handbook of H & H Wiring Devices. Booklet 8½ x
11 in. 16 pp. "Written by an Architect for Architects."

Hart & Hegeman Mfg. Co., The, 342 Capitol Avenue, Hartford,

Hart & Hegeman Mfg. Co., The, 342 Capitol Avenue, Hartford, Conn. H. Electrical Wiring Devices, Catalog S. 8½ x 10 in., pp. Lists and illustrates details of equipment.

Holtzer-Cabot Electric Company, Armory Street, Boston 19, Mass. Signalling Systems for Hospitals. Brochure. 8½ x 11 in. 42 pp. Illustrated. Contains complete data covering Nurse's Call, Doctor's Call, "In" and "Out" Fire Alarm, Watchman's Clock and Telephone Systems.

Holtzer-Cabot Electric Co., Boston and Chicago.
Bank signal and alarm systems. Brochure. 8½ x 11 in. 48 pp.
Illustrated. An invaluable work on protective and other appliance for banks.

pliance for banks.

Kohler Co., Kohler, Wis.

Principle and Proof. Booklet. 48 pp. Illustrated. Describes a standard voltage automatic electric power and light plant for isolated homes, for emergency auxiliary or permanent lighting in stores, theaters, churches and schools.

Pick & Company, Albert, 208 West Randolph St., Chicago, Ill. School Cafeterias. Booklet. 9 x 6 in. Illustrated. The design and equipment of school cafeterias with photographs of installation and plans for standardized outfits.

Kitchen Equipment. Booklet. 9 x 6 in. Illustrated. Photographs and descriptions of Hotel, Club and Hospital kitchens with treatise on plans and equipment of efficient kitchens.

Electric Kitchen Equipment. Booklet. 8½ x 11½ in. Illustrated. Photographs and descriptions of PIX "Master-Made" ranges, ovens, etc., for Hotels and Restaurants.

Simplex Wire & Cable Co., 201 Devonshire St., Boston, Mass.

ovens, etc., for Hotels and Restaurants.

Simplex Wire & Cable Co., 201 Devonshire St., Boston, Mass.

Simplex Manual Catalog and Reference Book, 6½ x 4½ in. 92 pp.
Contains in addition to information regarding Simplex products, tables and data for the ready reference of architects, electrical engineers and contractors.

Specification No. 2053. For Simcore Wires and Cables. Various sizes of Conductor-Rubber Insulation.

sizes of Conductor-Rubber Insulation.

Western Electric Co., 195 Broadway, New York, N. Y.

Western Electric Inter-Phones for Apartment Houses. Booklet.
554 x 634 in. 16 pp. Illustrated. Illustrates and describes use if Inter-Phones in Apartment Houses.

Installing and Maintaining Western Electric Inter-Phones. In addition to giving general information on layout of system, details are supplied on individual Inter-Phone Systems, listing battery and wiring requirements.

#### ELEVATORS

Otis Elevator Company, 260 Eleventh Ave., New York, N. Y.
Otis Push Button Controlled Elevators. Descriptive leaflets.
8½ x 11 in. Illustrated. Full details of machines, motors and
controllers for these types.
Otis Geared and Gearless Traction Elevators of All Types. Descriptive leaflets. 8½ x 11 in. Illustrated. Full details of
machines, motors and controllers for these types.
Escalators. Booklet. 8½ x 11 in. 22 pp. Illustrated. Describes
use of escalators in subways, department stores, theaters and
industrial buildings. Also includes elevators and dock elevators.

Richards-Wilcox Mfg. Co., Aurora, Ill. Elevators. Booklet. 8½ x 11 in. 24 pp. Illustrated. Describes complete line of "Ideal" elevator door hardware and checking devices, also automatic safety devices.

Sedgwick Machine Works, 151 West 15th St., New York, N. Y. Catalog and descriptive pamphlets, 4½ x 8½ in. 70 pp. Illustrated. Descriptive pamphlets on hand power freight elevators, sidewalk elevators, automobile elevators, etc.

#### ENAMELING

BS (IIII)

Toch Brothers, 110 East 42nd Street, New York City.

Specifications for Dampproofing, Waterproofing, Enameling and
Technical Painting. Complete and authoritative directions for
use of an important line of materials.

#### FIRE DOORS-See Doors, Windows and Trim, Metal

FIRE PROOFING—See also Construction, Fireproof
The General Fireproofing Company, Youngstown, Ohio.
Fireproofing Handbook, 8½ x 11 in. 64 pp. Illustrated. Gives methods of construction, specifications, data on Herringbone metal lath, steel tile, Trussit solid partitions, steel lumber, self-centering formless concrete construction.

#### FLOOR HARDENERS (CHEMICAL)

Sonneborn Sons, Inc., L., 116 Fifth Ave., New York, N. Y.
Lapidolith, the liquid chemical hardener. Complete sets of specifications for every building type in which concrete floors are used, with descriptions and results of tests.

FLOORING

Armstrong Cork & Insulation Co., 132 24th St., Pittsburgh, Pa. Linotile Floors for Public and Semi-Public Buildings, 7½ x 10¾ in. 36 pp. Linotile Floors for Residences. 7½ x 10¾ in. 32 pp. Armstrong's Cork Tile. Revised Edition. Booklet. 24 pp. 5 x 7 in. Illustrated in color. Contains complete specifications. Armstrong's Cork Tile Floors. Booklet, 7¾ x 10½ in. 30 pp. An illustrated work on cork flooring.

Armstrong Cork Co. (Linoleum Division), Lancaster, Pa. Armstrong's Linoleum Floors. Catalogs. 8½ x 11 in. 36 pp. Color plates. A technical treatise on linoleum, including table of gauges and weights and specifications for installing linoleum floors.

Decorative Linoleum Floors. Portfolio of Color Plates. 11¼ x 15 Decorative Linoleum Floors. Portfolio of Color Plates. 111/4 x 15

ganges and weights and provided by the provided by the production of the process and the provided by the provi

colors and designs. Each booklet describes a resident hour material as follows:

Battleship Linoleum.
durable, economical material.

Marble-ized Cork Composition Tile. Complete information on cork-composition marble-ized tile and the many artistic effects obtainable with it.

Treadlite Tile. Shows a variety of colors and patterns of this adaptable cork composition flooring.

Natural Cork Tile. Description and color plates of this super-

quiet, resilient floor.

Practical corking specifications for installing battleship linoleum, cork composition tile and cork tile.

Carter Bloxonend Flooring Co., Keith & Perry Bldg., Kansas City,

Mo.

Bloxonend Flooring. Booklet 3½ x 6½ in. 20 pp. Illustrated.

Describes uses and adaptability of Bloxonend Flooring to concrete, wood or steel construction, and advantages over loose wood blocks.

Describes uses and adaptability of Bloxonend Flooring to concrete, wood or steel construction, and advantages over loose wood blocks.

File Folder, 936 x 85% in. For use in connection with A. I. A. system of filing. Contains detailed information on Bloxonend Flooring in condensed, loose-leaf form for specification writer and drafting room. Literature embodied in folder includes standard Specification Sheet covering the use of Bloxonend in general industrial service and Supplementary Specification Sheet No. 1, which gives detailed description and explanation of an approved method for installing Bloxonend in gymnasiums, armories, drill rooms and similar locations where maximum resiliency is required.

Duraflex Company, Inc., 11 Pleasant Street, Baltimore, Md.

Why They Used It in One of Boston's Finest Buildings.

Typical of Character of One of the 13 Original States.

Illustrated 4-page brochures, 5½ x 8¾ in., giving data on "Duraflex" floors.

Permanent, Easy Tread Flooring. Folder. 4 pp. 8½ x 11 in. on floor covering material.

Specifications for Sub-Floors for "Duraflex." Folder. 11 pp. 8½ x 11 in. on base for laying "Duraflex."

Test of Floorings. Folder, 2 pp. Report of Flooring Committee of American Hospital Association.

Muller Co., Franklyn R., Waukegan, Ill.

Asbestone Composition Flooring. Circular. 8½ x 11 in. Descriptions and Specifications.

Norton Company, Worcester, Mass.

Filing Folder. 8½ x 11¾ in. 27 pp. Illustrated with drawings. Specification data for architects.

Ritter Lumber Co., W. M., Columbus, Ohio.

Ritter Oak Flooring, brochure 5 x 7 in. 31 pp. Illustrated. Excellent data on floors of different kinds and of various woods. Beauty Begins in the Forest.

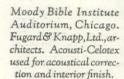
Large illustrated folder on modern flooring.

U. S. Gypsum Co., Chicago.

Pyrobar Floor Tile. Folder. 8½ x 11 in. Illustrated. Data on building floors of hollow tile, and tables on floor loading.

U. S. Rubber Co., 1790 Broadway, New York.

Period Adaptations for Modern Floors. Brochure. 8 x 11 in. 60 pp. Richly illustrated. A valuable w





Office of Mr. Marquette Healy, President Lyon & Healy, Chicago. Acousti-Celotex used for sound quieting and interior finish. Note the beautiful decorative effect secured on the ceiling.

Press room, Milwaukee Journal, Milwaukee, Wisconsin. Frank D. Chase, Inc., architects. Acousti-Celotex used on ceiling to quiet noise.



# Now

# a decorative sound-absorbing material

Architects are securing quiet, plus beauty, at moderate cost, with this unique acoustical material

EXCESSIVE noise is being recognized more than ever today as both a menace to health and a cause of needless industrial waste.

Hence, architects realize the advantages of an effective sound-absorbing material—not only for auditoriums, but for school rooms, offices and industrial buildings.

And they have found in Acousti-Celotex a material that serves both as a sound quieter and a beautiful wall and ceiling finish.

Acousti-Celotex is a highly efficient soundabsorber made in tile form from cane fibre. It has a pleasing soft texture surface, light tan in color and can be decorated in full color effects without materially reducing its unusual sound-absorbing qualities. No membrane or other covering is required.

#### Other advantages

Acousti-Celotex is permanent. The complete, rigid units become an integral part of the building, requiring only an occasional cleaning with a stiff brush or broom. Installation is efficiently made at reasonable cost by our approved Acousti-Celotex Contractors.

This material has been widely specified by leading architects in all sections of the country.

We have prepared a beautifully illustrated book in full color, showing some interesting installations and giving some idea of the beautiful decorative effects obtainable with Acousti-Celotex. May we send you a copy?

THE CELOTEX COMPANY, CHICAGO, ILL. Mills: New Orleans, Louisiana

Branch Sales Offices in many principal cities (See telephone books for addresses)

Canadian Representatives: Alexander Murray & Co., Limited; Montreal, Toronto, Halifax, Winnipeg, Vancouver

# ACOUSTI-CELOTEX

A PRODUCT OF THE CELOTEX COMPANY

### SELECTED LIST OF MANUFACTURERS' PUBLICATIONS—Continued from page 142

#### FOLDING PARTITIONS

Irving Hamlia, Evanston, Ill.
The Evanston Sound-Proof Door. Brochure. 8½ x 11 in. 8 pp.
Full data on Hamlinized Folding Partitions and Evanston
Sound-Proof Doors.

Wilson Corporation, J. G., 11 East 38th Street, New York, N. Y. Sectionfold and Rolling Partitions and Hygienic School Wardrobes. Catalog No. 37. Booklet 8½ x 11 in. 40 pp. Illustrated. Describes the uses of rolling and sectional partitions, particularly in schools and churches. Also the installation of Wilson school wardrobes.

#### FURNACES-See Heating Equipment.

#### FURNITURE

American Seating Co., 14 E. Jackson Blvd., Chicago, Ill.

Ars Ecclesiastica Booklet. 6 x 9 in. 48 pp. Illustrations of church fitments in carved wood.

Theater Chairs. Booklet. 6 x 9 in. 48 pp. Illustrations of theater chairs.

Kensington Mfg. Company, Showrooms, 41 west 45th St., New York.
Illustrated booklet indicative of the scope, character and decorative quality of Kensington Furniture, with plan of co-operation with architects, sent on request.
Photographs and full description of hand-made furniture in all the period styles, furnished in response to a specific inquiry.

White Door Bed Company, The, 130 North Wells Street, Chicago,

Booklet. 8½ x 11 in. 20 pp. Illustrated. Describes and illustrates the use of "White" Door Bed and other space-saving

#### GARDEN ACCESSORIES

Davey Tree Expert Company, The, 907 Elm St., Kent, Ohio.
When Your Trees Need The Tree Surgeon. Booklet. 16 pp.
8 x 9½ in. Illustrated. Lists and explains a number of serious
tree troubles of common occurrence; contrasts the scientific
methods used by properly trained and conscientious men to
remedy these troubles with the work of unscrupulous or untrained men.

#### GLASS CONSTRUCTION

Mississippi Wire Glass, 220 Fifth Avenue, New York.
Mississippi Wire Glass. Catalog. 37% x 8½ in. 32 pp. Illustrated. Covers the complete line.

#### GRANITE-See Stone, Building

Wickwire Spencer Steel Co., Inc., 41 East 42nd St., New York. Clinton Grilles. Booklet. 9 x 11 in. 12 pp. A brochure on metal grilles, particularly for use over heating radiators.

Cutler Mail Chute Company, Rochester, N. Y.
Cutler Mail Chute Model F. Booklet. 4 x 9¼ in. 8 pp. Illustrated.

trated.

McKinney Mfg. Co., Pittsburgh, Pa.

McKinney Complete Garage Hardware Sets. Catalog. 634 x 10 in. 20 pp. Illustrated. Describes full line of complete garage hardware sets for all kinds of entrances, with views of typical entrances and sketches.

McKinney Hinges and Butts. General Catalog. 634 x 10 in. Illustrates and describes complete line of McKinney wrought builders' hardware products, including hinges, butts, door hangers and track, latches, garage hardware and specialties.

Richards-Wilcox Mfg. Co., Aurora, Ill.

Distinctive Garage Door Hardware. Booklet. 8½ x 11 in. 65 pp.

Illustrated. Complete information accompanied by data and illustrations on different kinds of garage door hardware.

Sargent & Company, New Haven, Conn.
Details to Which Standard Hardware Can Be Applied. Booklet.
6 pp. 9 x 12 in. Illustrated. Treats with diagrams, portions of doors and windows to which hardware can be applied.
Sargent Locks and Hardware. Bound volume, 534 pp., 9 x 12 in., illustrated. Complete catalog of Sargent line of hardware.

#### HEATING EQUIPMENT

American Radiator Company, The, 40 West 40th St., N. Y. C. Ideal Type "A" Heat Machine. Catalog 734 x 10½ in. 32 pp. Illustrated in 4 colors. A brochure of high-efficiency heating apparatus for residences and commercial buildings.

Ideal Water Tube Boilers. Catalog 734 x 1054. 32 pp. Illustrated in 4 colors. Data on a complete line of Heating Boilers of the Water Tube type.

Ideal Smokeless Boilers. Catalog 734 x 10½ in. 32 pp. Illustrated in 4 colors. Fully explains a boiler free from the objection of causing smoke.

Ideal Boilers for Oil Burning. Catalog 5½ x 8½ in. 36 pp. Illustrated in 4 colors. Describing a line of Heating Boilers especially adapted to use with Oil Burners.

Corto—The Radiator Classic. Brochure 5½ x 8½ in. 16 pp. Illustrated. A brochure on a space-saving radiator of beauty and high efficiency.

Ideal Arcola Radiator Warmth. Brochure 6¼ x 9¼. Illustrated. Describes a central all-on-one-floor heating plant with radiators for small residences, stores, and offices.

James B. Clow & Sons, 534 S. Franklin St., Chicago, Ill. Gasteam. Catalog. 6 x 9 in. 16 pp. Illustrated. New radiator using gas for fuel.

#### HEATING EQUIPMENT-Continued

C. A. Dunham Company, 450 East Ohio Street, Chicago, III.

Dunham Radiator Trap. Bulletin 101. 8 x 11 in. 12 pp. Illustrated.

Explains working of this detail of heating apparatus.

Dunham Packless Radiator Valves. Bulletin 104. 8 x 11 in.

8 pp. Illustrated. A valuable brochurer on valves.

Dunham Return Heating System. Bulletin 109. 8 x 11 in. Illustrated.

Covers the use of heating apparatus of this kind.

Dunham Vacuum Heating System. Bulletin 110. 8 x 11 in.

12 pp. Illustrated.

Excelso Specialty Works. 110 Clinton St. Buffelo, N. V.

Excelso Specialty Works, 119 Clinton St., Buffalo, N. Y.
Excelso Water Heater. Booklet. 12 pp. 3 x 6 in. Illustrated.
Describing the new Excelso method of generating domestic
hot water in connection with heating boilers. (Firepot Coil eliminated.)

The Fulton Company, Knoxville, Tenn.

Sylphon, Temperature Regulators. Bulletin T-103. 8½ x 11 in.
16 pp. Complete data on Sylphon temperature regulators for air and liquids. Catalog 100, complete line Sylphon Heating Specialties

Damper Regulators. Air and Vent Valves. Catalog No. 100. 334 x 634 in. Sylphon Damper Regulators for steam, hot water and vapor systems. Sylphon Air and Vent Valves.

and vapor systems. Sylphon Air and Vent Valves.

Illinois Engineering Co., Racine Ave., at 21st St., Chicago, Ill.

Vapor Heat Bulletin 21. 8½ x 11 in. 32 pp. Illustrated. Contains
new and original data on Vapor Heating. Rules for computing
radiation, pipe sizes, radiator tappings. Steam table showing
temperature of steam and vapor at various pressures, also
description of Illinois Vapor Specialties.

description of Illinois Vapor Specialties.

International Heater Company, Utica, N. Y.
International Economy Blue Front Warm Air Furnace. Brochure, 23 pp., 7½ x 105% in. A valuable publication dealing with an important type of heating.

International Carton Self Cleaning Warm Air Furnaces. Booklet, 31 pp., 7½ x 105% in. Illustrated. Complete data on warm air heating.

International Economy Boilers. Booklet, 36 pp., 7½ x 195% ins. Deals with the vital matter of boilers.

International Economy Smokeless Boilers. Brochure, 40 pp., 7½ x 105% ins. Illustrated. Discusses an important type of smokeless boiler.

International Hot Water Supply Boilers. Booklet, 8 pp., 7½ x 105% ins. Data regarding boilers for supplying hot water.

Johnson Service Company, 149 Michigan St., Milwaukee, Wis. Regulation of Temperature and Humidity. Booklet. 11¼ x 8½ in. 64 pp. Illustrated. Describes Johnson system of pneumatic automatic regulation of temperature and humidity, and illustrates thermostats, valves, air compressors, dampers and other parts.

other parts.

Johnson Electric Thermostats, Valves and Controllers. Booklet.
6/8 x 3/4 in. 24 pp. Illustrated. Excellent plates showing electric thermostats and controllers.

tric thermostats and controllers.

Kelsey Heating Company, James St., Syracuse, N. Y.
Booklet No. 5, 4 x 9 in. 32 pp. Illustrated. A dealers' booklet
showing the Kelsey Warm Air Generator Method of warming
and distributing air. Gives dimensions, heating capacities,
weights, kind of coal recommended and shows the mechanical
and gravity systems of heating homes, churches and schools.
Monroe Pipeless Booklet, 4½ x 8 in. 20 pp. Illustrated.
Monroe Tubular Heater. Booklet 4½ x 8 in. 20 pp. Illustrated.
General Booklet giving capacities, dimensions, weights, etc.
Syracuse Pipeless Booklet. 4½ x 8 in. 12 pp. Illustrated. General
Booklet giving sizes and capacities.

Kewanee Boiler Co., Kewanee, Ill.

Kewanee Boiler Co., Kewanee, Ill.

Kewanee on the Job. Catalog. 8½ x 11 in. 80 pp. Illustrated. Showing installations of Kewanee boilers, water heaters, radiators, etc.

Catalog No. 78, 6 x 9 in. Illustrated. Describes Kewanee Firebox Boilers with specifications and setting plans.

Catalog No. 79. 6 x 9 in. Illustrated. Describes Kewanee power boilers and smokeless tubular boilers with specifications.

tions.

Mueller Co., Decatur, Ill.
Catalog G, 8 x 11 in., 316 pages. Profusely illustrated. Contains full data on plumbing, water and gas brass goods, including valves, faucets, traps, regulators, built-in bath equipment, and automatic systems of hot water control. Complete details are presented with a number of data sheets showing roughing-in-measurements for built-in bath equipment.

Nash Engineering Corpany, South Norwalk, Conn.
No. 37. Devoted to Jennings Hytor Return Line Vacuum Heating Pumps, electrically driven, and supplied in standard sizes up to 300,000 square feet equivalent direct radiation.
No. 16. Dealing with Jennings Hytor Air Line Heating Pumps. No. 17. Describing Jennings Hytor Condensation Pumps, sizes up to 70,000 square feet equivalent direct radiation.
No. 25. Illustrating Jennings Return Line Vacuum Heating Pumps. Size M, for equivalent direct radiation up to 5,000 square feet.

National Radiator Company, Johnstown, Pa.

National Radiator Company, Johnstown, Pa.

Aero Radiators; Beauty and Worth. Catalog 34. Booklet 6 x 9 in., 20 pp., describing and illustrating radiators and accessories.

Peerless Industrial Heating Unit. Folder 6 x 9 in. Deals specifically with heating industrial structures.

Peer Vent Heating and Ventilating Unit. Forchure, 6 x 6½ in. Illustrated. Valuable data on apparatus for ventilating and heating buildings of different types.

Trane Co., The, La Crosse, Wis.

Bulletin 14. 16 pp. 8½ x 105% in. Cover the complete line of
Trane Heating Specialties, including Trane Bellows Traps, and
Trane Bellows Packless Valves.

Bulletin 20. 24 pp. 8½ x 105% in. Explains in detail the operation and construction of Trane Condensation. Vacuum,
Booster, Circulating, and similar pumps.

# Standard Equipment on all these Boilers

Abendroth Ames Birchfield B-Line Burnham Coil

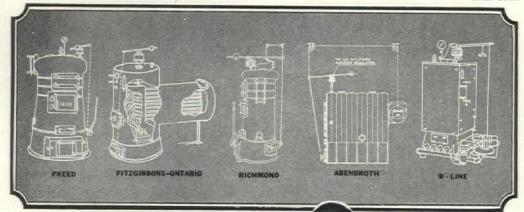
Coatesville Congress Fitzgibbons-Ontario Floral City Freed

Heggie-Simplex Imperial International Economy Kewanee Keystone

L-O Lansdale Molby Novelty National Oil City

Economy Pierce-Pebco Putnam Richardson Richmond

Ross Senate Spencer Standard Star Thatcher West Coast





sensitive type.



No. 22 Sylphon Damper Regulator for low p sure steam boilers.



No. 22-J Symmon Regulator for low pressure hollers with light No. 22-J Sylphon Damper

# Damper Regulators

There is no "lag" in Sylphon Damper Regulators. The sensitive, flexible Sylphon Bellows used as diaphragm gives quick and positive response to changes in steam pressure. This means that it unfailingly checks or opens the draft dampers the instant the pressure in the boiler gets too high or too low, thereby preventing overheating or underheating.

Anyone of the 34 leading boilers listed above comes

to you with a Sylphon Regulator attached as standard equipment; or you may specify it on any make of steam boiler.

When you insist on genuine Sylphon Damper Regulators for every boiler you specify, you guarantee uniform heating with low fuel consumption and completely automatic damper control for the life of the boiler. Refuse imitations.

Ask for Bulletin FDR-5

Every genuine Sylphon Bellows is drawn and formed seamless from a flat sheet of specially prepared metal, with folds or corrugations formed to provide the greatest strength and flexibility.



Breakdown, so common with the ordinary type of thermostat is eliminated, for neither years of constant use nor the powerful action of steam weaken the Sylphon Bellows.

ORIGINATORS AND PATENTEES OF THE SYLPHON BELLOWS Detroit

SALES OFFICES IN:

New York

Chicago and all the Principal Cities in U.S. Boston

Philadelphia

European representatives: Crosby Valve & Engineering Co., Ltd. 41-42 Foley Street, London, W. 1, England

Canadian representatives: Darling Bros., Ltd. 120 Prince Street, Montreal, Canada

### SELECTED LIST OF MANUFACTURERS' PUBLICATIONS—Continued from page 144

#### HEATING EQUIPMENT-Continued

Utica Heater Company, Utica, N. Y.
Imperial Round and Square Boilers and Supplies. Catalog.
3½ x 6½ in. Gives complete data on small heaters.
Special Folders: 8½ x 11 in. "Warmth and Comfort," describing the scientifically correct NEW IDEA pipeless furnaces. "SUPERIOR Warm Air Pipe Furnaces," a standard line of heating equipment for over forty years. "SUPER-SMOKELESS Pipe and Pipeless Furnaces," a new and remarkably efficient warm air heater, burning cheap soft. coal without smoke—utilizing the principle of the Bunsen Burner.
Utica Imperial SUPER-SMOKELESS Boiler. Catalog. 8½ x 11 in. Consists of the following seven bulletins, either loose or bound together: (1) School Heating Bulletin. (2) Public Building Bulletin. (3) Theater Heating Bulletin. (2) Public Building Bulletin (3) Theater Heating Bulletin. (4) Churches and Religious Institutions. (5) Residences, Apartments and Hotels. (6) Offices, Industrial Buildings and Garages. (7) Technical Bulletin describing patented Bunsen Burner design and construction of the SUPER-SMOKELESS BOILER, which burns the cheapest grades of soft coal smokelessly and operates equally well with hard coal, coke or fuel oil.

#### HEAT REGULATORS-See Heating Equipment

HOISTS-See Ash Hoists

HOLLOW TILE-See Tile, Hollow

HOSPITAL EQUIPMENT

The International Nickel Company, 67 Wall St., New York, N. Y. Hospital Applications of Monel Metal. Booklet. 8½ x 11½ in. 16 pp. Illustrated. Gives types of equipment in which Monel Metal is used, reasons for its adoption, with sources of such equipment.

The Kny-Scheerer Corporation of America, 119 Seventh Ave., New

York.

Hospital Equipment, 16th Edition. 7½ x 10½ in. 232 pp. Illustrated. Complete description of Hospital and Surgical Furniture, Hospital Appliances including Operating Tables, Cabinets, Sterilizers for Water, Dressing and Instruments, also Hydrotherapeutic Apparatus.

Surgical Sundries. Second Edition. Booklet. 7½ x 10½ in. 48 pp. Illustrated. A complete line of glassware, enamelware, rubber goods, restraint apparatus, instrument sterilizers, sputum cups, wheel chairs and sick room comforts.

Electro Medical. 25th Edition. Booklet. 7½ x 10½ in. 160 pp. Illustrated. A complete line of Albee Bone Sets. Apparatus for AC and DC Cystocopes, Heat Magnets, Vibrators, Compressors, Electric Light Baths, High Frequency Apparatus and X-Ray Apparatus and Accessories.

#### INCINERATORS

Goder Incinerator Corporation, 323 North Michigan Ave., Chicago,

Hinois.

"Goder Incinerators" Booklet. 8½ x 11 in. 16 pp. Illustrated. Describes the Goder Principle of Waste Disposal, illustrates the various designs and models, shows photos of actual inthe var-stallations.

stallations.

"Goder Chimney Fed Incinerators." Booklet 8 pp. 8½ x 11 in. Illustrated. Describes chimney fed types of incinerator. Shows various designs and photos of installations. Gives specifications, also showing construction plans and details.

"The Garbage Hog." Folder 8½ x 11 in. 4 pp. Describes their portable Incinerator, with diagrams.

Kerner Incinerator Company, 715 E. Water St., Milwaukee, Wis. Incinerators (Chimney-fed) Catalog No. 15 (Architect and Builders' Edition). Size 8½ x 11 in., 16 pp. Illustrated. Describes principle and design of Kernerator Chimney-fed Incinerators for residences, apartments, hospitals, schools, apartment hotels, clubs and other buildings. Shows all standard models and gives general information and working data.

Sanitary Elimination of Household Waste, booklet, 4 x 9 in., 16 pp., Illustrated. Gives complete information on the Kernerator for residences.

Garbage and Waste Disposal for Apartment Buildings, folder, 8½ x 11 in., 8 pp. Illustrated. Describes principle and design of Kernerator-Chimney-fed Incinerator for apartments and gives list of buildings where it has been installed.

Sanitary Disposal of Waste in Hospitals, booklet. 4 x 9 in., 12 pp. Illustrated. Shows how this necessary part of hospital service is taken care of with the Kernerator. Gives list of hospitals where installed.

#### INSULATING LUMBER

Mason Fibre Co., 111 West Washington St., Chicago, III.
Booklet, 12 pp., 8½ x 11 in. Illustrated. Gives complete specifications for use of insulating lumber and details of construction involving its use.

#### INSULATION

Armstrong Cork & Insulation Co., Pittsburgh, Pa.
Corkboard Insulation. Brochure. 6½ x 9½ in. Illustrated.
Fully discusses properties of corkboard and its uses in insulation of cold storage rooms, refrigerators, residences, apartment houses.

The Teachers of Poofs with Armstrong's Corkboard Booklet.

ment houses.

The Insulation of Roofs with Armstrong's Corkboard. Booklet. Illustrated. 7½ x 10½ in. 32 pp. Discusses means of insulating roofs of manufacturing or commercial structures. Insulation of Roofs to Prevent Condensation. Illustrated booklet. 7½ x 10½ in. 36 pp. Gives full data on valuable line of roof insulation.

Filing Folder for Pipe Covering Data. Made in accordance with A. I. A. rules.

"The Cork Lined House Makes a Comfortable Home." 5 x 7 in. 32 pp. Illustrated.

Cabot, Inc., Samuel, Boston, Mass.

Cabot's Insulating Quilt. Booklet, 7½ x 10½ ins., 24 pp., Illustrated. Deals with a valuable type of insulation.

#### INSULATION-Continued

Johns-Manville, Inc., New York.
Johns-Manville Service to Industry. Bound Volume. 260 pp. 8 x 11 in. Deals with Asbestos Roofings, Heat and Electrical Insulations. Waterproofing, and Industrial Flooring.
A Representation Installation of the Johns-Manville Underground System of Insulation. Booklet. 20 pp., 8½ x 11 in.

Philip Carey Co., The, Cincinnati, Ohio.
Carey Asbestos and Magnesia Products. Catalog. 6 x 9 in. 72 pp. Illustrated.

pp. Illustrated.

Celotex Company, The, 645 N. Michigan Ave., Chicago, Ill.
The Hidden Comfort of Costly Homes. Booklet 8½ x 11 in.
Celotex Specifications. Booklet 8½ x 11 in.

Johns-Manville, Inc., Madison Ave. and 41st St., New York, N. Y.
Johns-Manville Service to Power Users. Catalog. 8½ x 11 in.
150 pp. Illustrated. Contains valuable data on all forms of insulation, packages, steam traps, high temperature cements, brake locks and linings, also general technical data.

United States Mineral Wool Co., 280 Madison Ave, New York.
The Uses of Mineral Wool in Architecture. Booklet 4¼ x 6½ in. 24 pp. Illustrated. Describes properties of mineral wool as insulation against heat, frost, sound. Specifications and section drawing for use as a fireproofing. Rules for estimate and cost. and cost.

#### KITCHEN EQUIPMENT

Standard Gas Equipment Corporation, 18-20 East 41st Street, New York, N. Y.
VULCAN Gas Ranges and Appliances. Booklet. 5 x 8 in. 50 pp. Illustrated. Describes complete line, including VULCAN SMOOTH TOP Compact Cabinet Gas Ranges for kitchens in the home.

SMOOTH TOP Compact Cabinet Gas Ranges for Ritchens in the home.

VULCAN Gas Equipment for Hotels, Hospitals, Restaurants, etc. Booklet, 5 x 8 in. 45 pp. Illustrated. Equipment for heavyduty cooking requirements, with information of value to architects in planning kitchens.

The International Nickel Company, 67 Wall St., New York, N. Y. Hotels, Restaurants and Cafeteria Applications of Monel Metal. Booklet. 8½ x 11 in. 32 pp. Illustrated. Gives types of equipment in which Monel Metal is used, with service data and sources of equipment.

Mueller Co. Decatur. Ill

and sources of equipment.

Mueller Co., Decatur, Ill.
Catalog G, 8 x 11 in., 316 pages. Profusely illustrated. Contains full data on plumbing, water and gas brass goods, including valves, faucets, traps, regulators, built-in bath equipment, and automatic systems of hot water control. Complete details are presented with a number of data sheets showing roughing-in-measurements for built-in bath equipment.

measurements for built-in bath equipment.

Pick & Company, Albert, 208 W. Randolph St., Chicago, Ill.
School Cafeteria. Portfolio. 17 x 11 in. 44 pp. Illustrated. An
exhaustive study of the problems of school feeding, with copious
illustrations and blue prints. Very valuable to the architect.
School Cafeterias. Booklet. 9 x 6 in. Illustrated. The design
and equipment of school cafeterias with photographs of installation and plans for standardized outfits.
Kitchen Equipment. Booklet. 9 x 6 in. Illustrated. Photographs
and descriptions of Hotel, Club and Hospital kitchens with
treatise on plans and equipment of efficient kitchens.
Electric Kitchen Equipment. Booklet. 8½ x 11½ in. Illustrated.
Photographs and descriptions of PIX "Master-Made" ranges,
ovens, etc., for Hotels and Restaurants.
Hotel, Apartment Building, Club and Institution Installations.
Portfolio. 17 x 11 in. 100 pp. Shows, mostly by plates, how
the Albert Pick Company equips hotels completely from top
to bottom.

the Albert Pick Company equips hotels completely from top to bottom.

Equipment for Cafeterias, Lunch Rooms, Restaurants, and Din-ing Rooms. Portfolio. 17 x 11 in. 86 pp. Illustrated. The last word in Cafeteria equipment to meet all requirements.

#### LABORATORY EQUIPMENT

Alberene Stone Co., 153 West 23rd Street, New York City Booklet 834 x 111/4 in., 26 pp. Stone for laboratory equipment, shower partitions, stair treads, etc.

Duriron Company, Dayton, Ohio.

Duriron Acid, Alkali and Rust-proof Drain Pipe and Fittings.

Booklet, 8½ x 11 ins., 20 pp. Full details regarding a valuable form of piping.

Kewaunee Manufacturing Company, 141 Lincoln St., Kewaunee, Wis. Wis.

Kewaunee Book of Laboratory Furniture. Catalog. 7 x 10 in.

408 pp. Illustrated. Science and Vocational Laboratory Furniture for schools, colleges, technical institutes, hospitals, etc., including floor plans, illustrations of buildings and equipped laboratories, illustrations of equipment engineering data for mechanical ventilation and illustrations of special plumbing fixtures for laboratory use. A supplement is also issued for this work.

#### LANTERNS

Todhunter, Arthur, 414 Madison Ave., New York.

Hand Wrought Lanterns. Booklet. 5½ x 6½ in. 20 pp. Illustrated in Black and White. With price list. Lanterns appropriate for exterior and interior use, designed from old models and meeting the requirements of modern lighting.

#### LATH, METAL AND REINFORCING

The General Fireproofing Company, Youngstown, Ohio Herringbone Metal Lath Handbook. 8½ x 11 in. 32 pp. Illus-trated. Standard specifications for Cement Stucco on Herringnone. Rigid Metal Lath and interior plastering.

#### EVERY ROOF NEEDS INSULATION



Laying two-inch Armstrong's Corkboard Insulation on the roof of the Dickman Building, St. Louis, Mo. Wiedemeyer & Nelson, Architects. Swift Roofing Company, Roofing Contractors.

# Making the Roof Heat-Proof

T is a very simple matter to make a roof practically impervious to heat. And very desirable, too, for such a roof keeps a building cooler in summer, and in winter makes it easier to heat with less fuel.

Over the roof deck (wood, concrete, or metal) lay a single layer of Armstrong's Corkboard. This is laid in asphalt or pitch, or on wood roofs, simply nailed. Then put any standard roofing right over the cork in the usual way. There is nothing difficult or complicated about it; it involves no change in roof design.

Armstrong's Corkboard provides the insulation that makes the roof virtually heat-tight. It is so light that the additional weight is negligible. It is nonabsorbent and moisture-proof, and will not shrink, swell, buckle, or decay. Armstrong's Corkboard makes a firm, substantial base on which the roof-

ing may be laid as securely and permanently as on the deck itself. It cannot be ignited by sparks or embers, will not smolder or carry fire, and is a positive fire retardant.

In hundreds of buildings of all kinds—commercial, industrial, public, office, residential—the benefits of Armstrong's Corkboard insulated roofs are being demonstrated so effectively that their owners would never again even consider a building with an uninsulated roof. The increased comfort and economy resulting from insulation with Armstrong's Corkboard constitute an investment return which neither owner nor architect can afford to ignore.

Full information and detailed specifications are contained in the 36-page book, "The Insulation of Roofs with Armstrong's Corkboard." Copy and sample will be sent on request.

#### ARMSTRONG CORK & INSULATION COMPANY

(Division of Armstrong Cork Company)

205 Twenty-fourth St., Pittsburgh, Pa. McGill Bldg., Montreal, Que.
Armstrong Cork Company, Ltd., Sardinia House, Kingsway,
London, W. C. 2, England

Branches in the Principal Cities of the United States

# Armstrong's Corkboard Insulation

for the Roofs of All Kinds of Buildings

### SELECTED LIST OF MANUFACTURERS' PUBLICATIONS—Continued from page 146

#### LATH, METAL AND REINFORCING-Continued

Massillon Steel Joist Co., Canton, Ohio.

Massillon Metal Lath. Pamphlet. 8½ x 11 in., 8 pp., illustrated. Covers entire line of Diamond Flat Mesh Lath, ½ in. and ¾-in. Rib Lath, complete line of 16-gauge channels, box channels, pencil channels, base and corner beads, tie wire and

hanger wire.

Milwaukee Corrugating Co., Milwaukee, Wis.

Milwaukee Corrugating Co., Milwaukee, Wis.

The Milcor Manual. Booklet 8½ x 11 in. 64 pp. Illustrated. Covers Milcor methods and materials, metal lath, corner beads, steel domes, channels, etc.

Northwestern Expanded Metal Co., 1234 Old Colony Building,

Northwestern Expanded Metal Co., 1234 Old Colony Building, Chicago, Ill.

Northwestern Expanded Metal Products. Booklet. 8½ x 10¾ in. 16 pp. Fully illustrated, and describes different products of this company, such as Kno-burn metal lath, 20th Century Corrugated. Plaster-Sava and Longspan lath channels, etc. Wickwire Spencer Steel Co., Inc., 41 East 42nd St., New York. Clinton Wire Lath. Brochure. 9 x 11 in. 51 pp. A valuable booklet on metal lathing and the proper method of using it.

#### LAUNDRY CHUTES

The Pfaudler Company, 217 Cutler Building, Rochester, N. Y. Pfaudler Glass-Lined Steel Laundry Chutes. Booklet. 5½ x 7½ in. 16 pp. Illustrated. A beautifully printed brochure describing in detail with architects' specifications THE PFAUDLER GLASS LINED STEEL LAUNDRY CHUTES. Contains views of installations and list of representative examples.

#### LIGHTING EQUIPMENT

Curtis Lighting, Inc., Chicago, III.
Catalog 393. 8 x 10 in. 34 pp. Illustrated. Describes and illustrates X-Ray reflectors for show cases and windows, and lighting fixtures for interior illumination of stores.
Curtis Lighting, Inc., 1119 West Jackson Boulevard, Chicago, III.
Lighting Specifications.—A. I. A. File 31 F. Looseleaf. 8½ x 11 in. Architectural detail plates on church, restaurant and home lighting. Complete details, illustrations and helpful ideas on direct and indirect illumination. Sent free to any registered architect who requests them on his own letterhead.
Guth Company, The Edwin F., 2615 Washington Ave., St. Louis, Mo.

Guth Company, The Edwin F., 2615 Washington Ave., St. Louis, Mo.

Guth Lighting Equipment (Catalog No. 15). Booklet, 8½ x 11 ins. Fully illustrated, and covering lighting fixtures for buildings of all kinds.

Forge Craft (Catalog No. 16). Booklet, 16 pp., 8½ x 10¾ ins. Brochure dealing specifically with fixtures intended for use in buildings of the so-called "bungalow" type.

Pittsburgh Reflector Co., Pittsburgh, Pa.

Cove Lighting. Booklet. 8½ x 11 in. 24 pp. Gives complete data on lighting of this type.

Show Window Lighting. Booklet. 8½ x 11 in. 28 pp. A most useful work on lighting these important areas.

#### MAIL CHUTES

Cutler Mail Chute Company, Rochester, N. Y.
Cutler Mail Chute Model F. Booklet. 4 x 91/4 in. 8 pp.
Illustrated.

Arthur Todhunter, 414 Madison Avenue, New York, N. Y.
Georgian Mantels. New Booklet. 24 pp. 5½ x 6½ in. A fully
illustrated brochure on eighteenth century mantels. Folders
give prices of mantels and illustrations and prices of fireplace
equipment.

#### MARBLE

The Georgia Marble Company, Tate, Ga. New York Office, 1328
Broadway.
Why Georgia Marble is Better. Booklet. 33% x 6 in. Gives
analysis, physical qualities, comparison of absorption with
granite, opinions of authorities, etc.
Convincing Proof. 33% x 6 in. 8 pp. Classified list of buildings
and memorials in which Georgia Marble has been used, with
names of Architects and Sculptors.

#### METAL LATH-See Lath, Metal and Reinforcing METALS

American Sheet & Tin Plate Co., Frick Building, Pittsburgh, Pa.
Reference Book. Pocket Ed. 2½ x 4½ in. 168 pp. Illustrated.
Covers the complete line of Sheet and Tin Mill Products.
Apollo and Apollo-Keystone Galvanized Sheets. Catalog. 8½
x 11 in. 20 pp. Illustrated.
Research on the Corrosion Resistance of Copper Steel. Booklet.
8½ x 11 in. 24 pp. Illustrated. Technical information on results of atmospheric corrosion tests of various sheets under
actual weather conditions.
The International Nickel Company, 67 Wall St., New York, N. Y.
The Choice of a Metal. Booklet. 6¼ x 3 in. 166 pp. Illustrated. Monel Metal—its qualities, use and commercial forms,
briefly described.

### METAL TRIM—See Doors and Trim, Metal MILL WORK—See also Wood

Curtis Companies Service Bureau, Clinton, Iowa.

Architectural Interior and Exterior Woodwork. Standardized.

Book. 9 x 11½ in. 240 pp. Illustrated. This is an Architects'
Edition of the complete catalog of Curtis Woodwork, as designed by Trowbridge & Ackerman. Contains many color

Edition of the complete catalog of Curtis Woodwork, as designed by Trowbridge & Ackerman. Contains many color plates.

Better Built Homes. Vols. XV-XVIII incl. Booklet. 9 x 12 in. 40 pp. Illustrated. Designs for houses of five to eight rooms, respectively, in several authentic types, by Trowbridge & Ackerman, architects for the Curtis Companies. Curtis Details. Booklet. 19½ x 23½ in. 20 pp. Illustrated. Complete details of all items of Curtis woodwork, for the use of architects.

of architects

#### MILL WORK-Continued

Roddis Lumber & Veneer Company, Marshfield, Wis.
Roddis Doorman. Booklet. 10½ x 7½ in. 12 pp. Illustrated.
Describes and illustrates the use of Roddis Doors for residences, clubs, hotels, etc.

dences, clubs, notels, etc.

Hartmann-Sanders Company, 2155 Elston Ave., Chicago, Ill.
Column Catalog. 7½ x 10 in. 48 pp. Illustrated. Contains
prices on columns 6 to 36 in. diameter, various designs and
illustrations of columns and installations.
The Pergola Catalog. 7½ x 10 in. 64 pp. Illustrated. Contains illustrations of pergola lattices, garden furniture in
wood and cement, garden accessories.

#### MORTAR COLORS

Clinton Metallic Paint Co., Clinton, N. Y.

Clinton Mortar Colors. Folder. 8½ x 11 in. 4 pp. Illustrated in color, gives full information concerning Clinton Mortar Colors with specific instructions for using them.

Color Card. 6½ x 3¼ in. Illustrates in color the ten shades in which Clinton Mortar Colors are manufactured. Something new in Stucco. Folder. 3½ x 6 ins. An interesting folder on the use of coloring matter for stucco-coated walls.

#### PAINTS, STAINS, VARNISHES AND WOOD FINISHES

Cabot, Inc., Samuel, Boston, Mass.
Cabot's Creosote Stains. Booklet. 4 x 8½ in. 16 pp. Illustrated.

The Glidden Company, Cleveland, Ohio.

More Daylight. 8 x 10½ in. 20 pp. Portraying by illustrations and text the need and methods of modern mill painting. Glidden Specification Book. 8 x 10¼ in. 12 pp. Complete architectural specifications for Glidden Paints and Varnishes, including Ripolin. Directions for the proper finishing of wood, metal plaster, concrete, brick and other surfaces.

Martin Varnish Co., 2500 Quarry St., Chicago, Ill.
Architectural Specifications. Booklet. 8½ x 11 in. 20 pp.
Illustrated. Complete guide for Architects in specifying
Martin Varish Products.
Your Floors. Booklet. 5 x 7 in. 20 pp. Illustrated. Explains
fully how to finish all kinds of floors and woodwork with
Martin's Pure Varnish.

Keramic Catalog. Booklet. 26 pp., 8½ x 11 in. A magnificent brochure illustrated in color, describing a valuable line of specialties for use with concrete floors—colorings, hardeners, waterproofing, etc.

specialties for use with concrete floors—colorings, hardeners, waterproofing, etc.

National Lead Company, 111 Broadway, New York, N. Y. Handy Book on Painting. Book. 5½ x 3¾ in. 100 pp. Gives directions and formulæ for painting various surfaces of wood, plaster, metals, etc., both interior and exterior.

Red Lead in Paste Form. Booklet. 6¼ x 3½ in. 16 pp. Illustrated. Directions and formulæ for painting metals.

Came Lead. Booklet. 8¾ x 6 in. 12 pp. Illustrated. Describes various styles of lead cames.

Cinch Anchoring Specialties. Booklet. 6 x 3½ in. 20 pp. Illustrated. Describes complete line of expansion bolts.

Pratt & Lambert, Inc., Buffalo, N. Y.

Specification Manual for Paint, Varnishing and Enameling. Booklet, 38 pp., 7½ x 10% ins. Complete specifications for painting, varnishing and enameling interior and exterior wood, plaster, and metal work.

The Ripolin Company, Cleveland, Ohio.

Ripolin Specifications. Book. 8 x 10¼ in. 12 pp. Complete specifications and general instructions for the application of Ripolin, the original Holland enamel paint. Also directions for proper finishing of wood, metal, plaster, concrete, brick and other surfaces.

Why Ripolin Has an International Reputation. 8 x 10¾ in. 24 pp. Designed for the architect's files to illustrate the many varied uses of Ripolin Enamel Paint in all parts of the world. Profusely illustrated.

Ruberoid Co., The (formerly the Standard Paint Co.), 95 Madison Avenue, New York, N. Y.

Profusely illustrated.

Ruberoid Co., The (formerly the Standard Paint Co.), 95 Madison Avenue, New York, N. Y.

Preservative Coating. Booklet. 6 x 9 in. 15 pp. Illustrated.

Presents in a concise manner the properties and uses of the Ruberoid Company's various paint preparations.

Sherwin-Williams Company, 601 Canal Rd., Cleveland, Ohio.

Painting Concrete and Stucco Surfaces. Bulletin No. 1. 8½ x 11 in. 8 pp. Illustrated. A complete treatise with complete specifications on the subject of Painting of Concrete and Stucco Surfaces. Color chips of paint shown in bulletin.

Enamel Finish for Interior and Exterior Surfaces. Bulletin No. 2, 8½ x 11 in. 12 pp. Illustrated. Thorough discussion, including complete specifications for securing the most satisfactory enamel finish on interior and exterior walls and trim. Painting and Decorating of Interior Walls. Bulletin No. 3, 8½ x 11 in. 20 pp. Illustrated. An excellent reference book on Flat Wall Finish, including texture effects, which are taking the country by storm. Every architect should have one on file.

on file.

Protective Paints for Metal Surfaces. Bulletin No. 4. 8½ x 11 in. 12 pp. Illustrated. A highly technical subject treated in a simple, understandable manner.

Sonneborn Sons, Inc., L., Dept. 4, 116 Fifth Avenue, New York. Paint Specifications. Booklet. 8½ x 10¾ in. 4 pp.

#### PANELING-See Millwork

#### PARTITIONS

Circle A Products Corporations, New Castle, Ind.
Circle A Partitions Sectional and Movable. Brochure. Illustrated. 8½ x 11½ in. 32 pp. Full data regarding an important line of partitions, along with Erection Instructions for partitions of three different types.



Bloomington High School
Bloomington, Illinois
Architect:
A. L. Pillsbury
Plumber:
Ross Johnson



Phil Sheridan School
Chicago, Ill.
Architect:
John A. Christiansen
Plumber:
Murphy Plumbing Company



Gregory School
Chicago, Ill.
Architect:
John A. Christiansen
Plumber:
Murphy Plumbing Company



Austin, Minnesota, High School

Architect:
G. L. Lockhart

Plumber:
J. P. Adamson & Company



Dubuque, Iowa, Junior High School Number 1 Architect: Rayer, Danely & Smith Plumber: Dooley & Bruininga



Wentworth School Chicago, Ill. Architect: John A. Christiansen Plumber: Henry J. Becker

# Clow Quality Can Be Measured By The Absence Of High Upkeep And Replacement Costs.

HERE plumbing is subjected to the hard usage that it receives in public schools, its quality is measured in terms of upkeep and replacement costs.

One of the outstanding reasons for Clow's increasing pre-eminence in the field of school plumbing is the minimizing, and often total absence, of these costs.

Every piece of Clow equipment is put through a complete "set-up" test before shipment. The assembled equipment is set up just as it will be when installed, and tested for fit, operation, and quality.

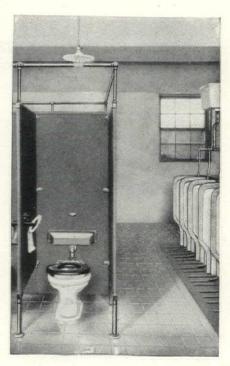
In addition, the Clow Chicago Plant, the largest plant devoted

to the distribution of plumbing, heating and steam supplies in the world, has exceptional facilities for storing and shipping—assuring prompt shipment of any equipment to any job.

When you inspect Clowinstallations that are living through their tenth and fifteenth year of active service — and when you inspect the cost records that those installations have established—you can appreciate why Clow Plumbing is specified for so many modern schools.

JAMES B. CLOW & SONS 201-299 North Talman Avenue CHICAGO

Sales offices in principal cities



PREFERRED FOR EXACTING PLUMBING SINCE 1878

### SELECTED LIST OF MANUFACTURERS' PUBLICATIONS—Continued from page 148

#### PARTITIONS-Continued

Hauserman Company, E. F., Cleveland, Ohio.
Hollow Steel Standard Partitions. Various folders, 8½ x 11.
Illustrated. Give full data on different types of steel partitions, together with details, elevations and specifications.

together with details, elevations and specifications.

Improved Office Partition Company, 25 Grand St., Elmhurst, L. I.

Telesco Partition. Catalog. 8½ x 11 in. 14 pp. Illustrated.

Shows typical offices laid out with Telesco partitions, cuts of finished partition units in various woods. Gives specifications and cuts of buildings using Telesco.

Detailed Instructions for erecting Telesco Partitions. Booklet. 24 pp. 8½ x 11 in. Illustrated. Complete instructions, with cuts and drawings, showing how easily Telesco Partition can be erected.

Richards-Wilcox Mfg. Co., Aurora, Ill.
Partitions. Booklet. 7 x 10 in. 32 pp. Illustrated. Describes
complete line of track and hangers for all styles of sliding,
parallel, accordion and flush door partitions.

Sanymetal Products Co., Cleveland, Ohio.

Sanymetal Partitions for Toilet Rooms. Booklet. 7¾ x 11 in. 24 pp. Illustrated. Complete data on a valuable line of toilet 24 pp. Illustrate room partitions.

Sanymetal Products. Brochure. 8½ x 11 in. 40 pp. Illustrated. Describes metal partitions, wainscots, roller hinges and toilet room hardware.

U. S. Gypsum Co., Chicago.

Pyrobar Partition and Furring Tile. Booklet. 8½ x 11 in. 24
pp. Illustrated. Describes use and advantages of hollow tile
for inner partitions.

American Brass Company, Waterbury, Conn.

Bulletin B-1. Brass Pipe for Water Service. 8½ x 11 in. 28
pp. Illustrated. Gives schedule of weights and sizes (I.P.S.)
of seamless brass and copper pipe, shows typical installations
of brass pipe, and gives general discussion of the corrosive
effect of water on iron, steel and brass pipe.

Clow & Sons, James B., 534 S. Franklin St., Chicago, Ill.
Catalog "A". 4 x 6½ in. 700 pp. Illustrated. Shows a full
line of steam, gas and water works supplies.

Copper & Brass Research Association, 25 Broadway, New York

Copper & Brass Research Association, 25 Broadway, New York City.

Brass Pipe Plumbing for Your House. Booklet 7 x 10½ in., 16 pp. Useful work on the value of brass piping.

Duriron Company, Dayton, Ohio.

Acid-proof Exhaust Fans. Folder, 8 x 10½ ins., 8 pp. Data regarding fans for ventilation of laboratory fume hoods. Specifications form for acid-proof exhaust fans, 8 x 10½ ins.

National Tube Co., Frick Building, Pittsburgh, Pa.

"National" Bulletin No. 2. Corrosion of Hot Water Pipe, (8½ x 11 in. 24 pp.) Illustrated. In this bulletin is summed up the most important research dealing with hot water systems. The text matter consists of seven investigations by authorities on this subject.

"National" Bulletin No. 3. The Protection of Pipe Against Internal Corrosion (8½ x 11 in. 20 pp.) Illustrated. Discusses various causes of corrosion, and details are given of the deactivating and deaerating systems for eliminating or retarding corrosion in hot water supply lines.
"National" Bulletin No. 25. "National" Pipe in Large Buildings. 8½ x 11 in. 88 pp. This bulletin contains 254 illustrations of prominent buildings of all types, containing "National" Pipe and considerable, engineering data of value to architects, engineers, etc.

Modern Welded Pipe. Book of 88 pp. (8½ x 11 in.), profusely

engineers, etc.

Modern Welded Pipe. Book of 88 pp. (8½ x 11 in.), profusely illustrated with halftone and line engravings of the important operations in the manufacture of pipe.

#### PLUMBING EQUIPMENT

Clow & Sons, James B., 534 S. Franklin Street, Chicago, Ill. Catalog "M." 914 x 12 in. 184 pp. Illustrated. Shows complete line of plumbing fixtures for Schools, Railroads and Industrial

Crane Company, 836 S. Michigan Avenue, Chicago, Ill.
Plumbing Suggestions for Home Builders. Catalog. 3 x 6 in. 80
pp. Illustrated.
Plumbing Suggestions for Industrial Plants. Catalog. 4 x 6½ in.
43 pp. Illustrated.
Planning the Small Bathroom. Booklet. 5 x 8 in. Discusses
planning bathrooms of small dimensions.

Douglas Co., The John, Cincinnati, Ohio.
Catalog "C." 10½ x 8 in. 200 pp. Illustrated. Illustrates and describes the Douglas complete line of China Sanitary plumb-

ing fixture. Booklet. Do Illustrated. fixture. et. Douglas Suggests for Your Home. 6 x 3½ in. 39 pp.

Duriron Company, Dayton, Ohio.
Duriron Acid, Alkali and Rust-proof Drain Pipe and Fittings.
Booklet, 8½ x 11 ins., 20 pp. Full details regarding a valuable form of piping.

Eljer Company, Fort City, Pa.
Complete Catalog. 334 x 634 in. 104 pp. Illustrated. Describes fully the complete Eljer line of standardized vitreous china plumbing fixtures, with diagrams, weights and measurements. Standardized Sixteen Circular. 334 x 634 in. 18 pp. Illustrated.

Kohler Co., Kohler, Wis.
Catalog F. 7½ x 10½ in. 216 pp. Illustrates and describes the complete line of Kohler trade-marked plumbing ware.
Roughing-In Measurement Binder. 5 x 8 in., containing loose leaf sheets on all staple fixtures.

#### PLUMBING EQUIPMENT—Continued

Maddock's Sons Company, Thomas, Trenton, N. J.
Catalog K. 10% x 7% in. 242 pp. Illustrated. Complete data
on vitreous china plumbing fixtures with brief history of
Sanitary Pottery.

Mueller Co., Decatur, Ill.

Catalog G, 8 x 11 in., 316 pages. Profusely illustrated. Contains full data on plumbing, water and gas brass goods, including valves, faucets, traps, regulators, built-in bath equipment, and automatic systems of hot water control. Complete details are presented with a number of data sheets showing roughing-in-measurements for built-in bath equipment.

peakman Company, Wilmington, Del.

Speakman Showers and Fixtures. Catalog. 4½ x 7½ in. 250 pp.

Illustrated. Catalog of Modern Showers and Brass Plumbing

Fixtures, with drawings showing layouts, measurements, etc.

Toned Up in Ten Minutes. Booklet. 7½ x 10½ in. 16 pp. Illustrated. Modern Showers and Washups for Industrial Plants, showing the sanitary method of washing in running water.

#### PUMPS

Chicago Pump Company, 2300 Wolfram Street, Chicago, Ill. . . . . . . The Correct Pump to Use. Portfolio containing handy data. Individual bulletins, 8½ x 11 in., on bilge, sewage, condensation, circulating, house, boiler feed and fire pumps.

Kewanee Private Utilities Co., 442 Franklin St., Kewanee, Ill. ....
Bulletin F. 734 x 1014 in. 32 pp. Illustrated. Catalog. Complete descriptions, with all necessary data, on Standard Service Pumps, Indian Brand Pneumatic Tanks, and Complete Water Systems, as installed by Kewanee Private Utilities Co.

Ramp Buildings Corporation, 21 East 40th Street, New York.
Building Garages for Profitable Operation. Booklet. 8½ x 11 in.
16 pp. Illustrated. Discusses the need for modern mid-city
parking garages, and describes the d'Humy Motoramp system
of design, on the basis of its superior space economy and features of operating convenience. Gives cost analyses of garages
of different sizes, and calculates probable earnings.
Garage Design Data. Series of informal bulletins issued in looseleaf form, with monthly supplements.

The Trane Co. LaCrosse. Wis.

The Trane Co., LaCrosse, Wis.

Trane Small Centrifugal Pumps. Booklet. 334 x 8 in., 16 pp.
Complete data on an important type of pump.

Complete data on an important type of pump.

The Hockenbury System Incorporated, Harrisburg, Pa., for years specializing in the financing of modern community hotels, of which they have financed a hundred such throughout the United States, has expanded its service to include the financing of MOTORAMP garage buildings. They now have available for distribution an 8¾ x 11 booklet entitled: "The Hitching Post Problem Is Here Again," in which they explain their solution of the street motor parking problem, which will be sent free to inquiring architects.

#### REINFORCED CONCRETE-See also Construction, Concrete

The General Fireproofing Company, Youngstown, Ohio.
Self-Sentering Handbook. 8½ x 11 in. 36 pp. Illustrated.
Methods and specifications on reinforced concrete floors, roofs
ands floors with a combined form and reinforced material.

Truscon Steel Company, 250 W. Lafayette Blvd., Detroit, Mich. Shearing Stresses in Reinforced Concrete Beams. Booklet. 8½ x 11 in. 12 pp.

North Western Expanded Metal Company, Chicago, Ill.

Designing Data. Book. 6 x 9 in. 96 pp. Illustrated. Company the use of Econo Expanded Metal for various types of forced concrete construction.

#### ROOFS (INSULATED)

Holorib, Inc., 2735 Prospect Ave., Cleveland, Ohio.
Holorib Insulated Roofs. Booklet, 16 pp., 8½ x 11 in.. Gives complete data regarding a valuable line of insulated roofing materials.

American Sheet & Tin Plate Co., Frick Bldg., Pittsburgh, Pa.
Better Buildings. Catalog. 8½ x 11 in. 32 pp. Describes Corrugated and Formed Sheet Steel Roofing and Siding Products, black, painted and galvanized, with directions for application of various patterns of Sheet Steel Roofing in various types of construction.

Copper—Its Effect Upon Steel for Roofing Tin. Catalog. 8½ x 11 in. 28 pp. Illustrated. Describes the merits of high-grade roofing tin plates and the advantages of the copper-steel alloy. The Testimony of a Decade. Booklet. 8½ x 11 in. 16 pp., with Graphic Chart and illustrations showing losses to various Iron and Steel Sheets for roofing, from atmosphere corrosion.

Barber Asphalt Co., Philadelphia, Pa.

Specifications, Genasco Standard Trinidad Lake Asphalt Builtup Roofing. Booklet. 8 x 10½ in. Gives specifications for
use of several valuable roofing and waterproofing materials.

Philip Carey Co., Lockland, Cincinnati, Ohio.

Philip Carey Co., Lockland, Cincinnati, Ohio.

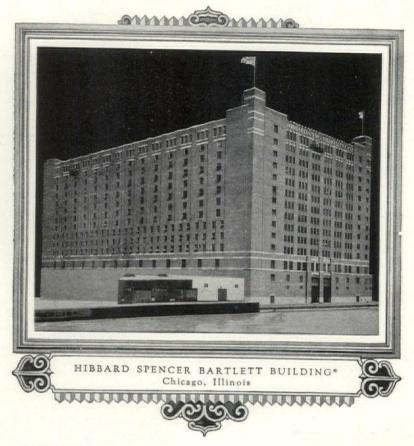
Architects Specifications for Carey Built-up Roofing. Booklet.

8 x 1034 in. 24 pp. Illustrated. Complete data to aid in specifying the different types of built-up roofing to suit the kind of roof construction to be covered.

Carey Built-up Roofing for Modern School Buildings. Booklet.

8 x 1034 in. 32 pp. Illustrated. A study of school buildings of a number of different kinds and the roofing materials adapted for each.

# There are No Mental Hazards in Carney



WHEN Carney appears in the specifications, there is one thing certain—you can cast aside all misgivings and mental anxieties as to the outcome of the mortar.

In the first place, Carney forms a bond that is rarely equaled. Once set, Carney remains so forever. But, Carney does more than form a perfect bond. Certain inherent qualities actually protect Carney mortar against improper mixing.

In Carney Mortar, there are but three elements to be considered—water, sand and Carney. There is no soaking or slaking to be watched and no lime needed. These features alone are important, but Carney goes even farther to relieve the architect of mortar worries—Carney can't be over-sanded. The instant too much sand is added, the natural plasticity of Carney mortar is affected, making troweling difficult for the masons.

When you put Carney on a job, you will find a valuable check against mixing mistakes and adulteration.

#### THE CARNEY COMPANY

Cement Makers Since 1883

DISTRICT SALES OFFICES: Cleveland, Chicago, St. Louis, Detroit, Minneapolis

Specifications: 1 part Carney to 4 parts sand.

for Brick and Tile Mortar

\*Architects—Graham Anderson Probst & White, Chicago, Ill. \*Contractor—Henry Ericsson Co., Chicago, Ill.

### SELECTED LIST OF MANUFACTURERS' PUBLICATIONS—Continued from page 150

#### ROOFING-Continued

Copper & Brass Research Association, 25 Broadway, New York City Copper Roofing. Brochure 8½ x 11 in., 28 pp. Third edition of a well-written manual on roofing.

Copper Flashings. Brochure 8½ x 11 in., 66 pp. Illustrated second edition of a valuable treatise on an important subject.

Federal Cement Tile Co., 608 So. Dearborn St., Chicago, Ill.

The Indestructible Roof. Booklet. 10 x 13 in. 32 pp. Illustrated. Illustrates and describes the installation of permanent concrete interlocking tile, tile with glass insets, flat tile and channel tile, on all types of industrial plants and other buildings with flat and pitched surfaces.

Standards. Booklet. 8½ x 11 in. 40 pp. Illustrated with full-page drawings. Gives full details of all forms of roof construction of steel structure, ridge and gutter construction, purlin arrangement, spacing, etc., for standard roofs.

Johns-Manville, Inc., Madison Ave. & 41st St., New York, N. Y. Johns-Manville Building Materials. Book. 8½ x 11 in. 100 pp. Illustrated. A comprehensive catalog of various types of roofing for all forms of construction. Details of wall, floor and ceiling insulation; asbestos wood for fireproof construction; waterproofing, etc.

Johns-Manville Asbestos Shingles. Booklet. 8½ x 11 in. 24 pp. Illustrated. This booklet is profusely illustrated in colors, showing some very artistic blends of asbestos shingles with various types of architecture. Contains many valuable suggestions for the architect.

Ludowici-Celadon Company, 104 So. Michigan Ave., Chicago, Ill.

"Ancient" Tapered Mission Tiles. Leaflet. 8½ x 11 in. 4 pp.

the architect.

Ludowici-Celadon Company, 104 So. Michigan Ave., Chicago, Ill.

"Ancient" Tapered Mission Tiles. Leaflet. 8½ x 11 in. 4 pp.

Illustrated. For architects who desire something out of the ordinary, this leaflet has been prepared. Describes briefly the "Ancient" Tapered Mission Tiles, hand-made, with full corners and designed to be applied with irregular exposures.

Milwaukee Corrugating Co., Milwaukee, Wis.

The Milcor Architectural Sheet Metal Guide. Booklet. 8½ x 11 in. 64 pp. Illustrated. Gives valuable technical sheet metal data.

Ruberoid Co., The (formerly the Standard Paint Co.), 95 Madison Avenue, New York, N. Y.

Instructions for Laying Built-up Roofs. Booklet. 8½ x 11 in. Illustrated.

Ruberoid Strip Shingle. Booklet. 3½ x 6½ in 16 cm. 10.

Ruberoid Strip Shingle. Booklet. 3½ x 6¼ in. 16 pp. Illus-

trated in color.

U. S. Gypsum Co., Chicago.

Pyrobar Roof Construction. Booklet. 8 x 11 in. 48 pp. Illustrated. Gives valuable data on the use of tile in roof construction. Sheetrock Pyrofill Roof Construction. Folder. 8½ x 11 in. Illustrated. Covers use of roof surfacing which is poured in place.

#### SASH CHAIN

Smith & Egge Mfg. Co., The, Bridgeport, Conn. Chain Catalog. 6 x 8½ in. 24 pp. Illustrated. Covers complete line of chains.

#### SASH CORD

Samson Cordage Works, Boston, Mass.
Catalog. 3½ x 6¾ in. 24 pp. Illustrated. Covers complete line of rope and cord.

Athey Company, 5015 West 65th St., Chicago, Ill.

The Athey Perennial Window Shade. An accordian pleated window shade, made from translucent Herringbone woven Coutil cloth, which raises from the bottom and lowers from the top. It eliminates awnings, affords ventilation, can be dry-cleaned and will wear indefinitely.

Copper & Brass Research Association, 25 Broadway, New York City. Screens That Keep Them Out. Booklet 6 x 9 in. 16 pp. A valuable brochure on wire mesh of rust-proof and pest-proof screen material.

n material.

screen material.

The Higgin Manufacturing Co., Newport, Ky.

Your Home Screened the Higgin Way. Booklet. 8½ x 11½ in.

13 pp. Illustrated in colors. Complete description of Higgin Screens, designed to meet every need.

#### SEWAGE DISPOSAL

Kewanee Private Utilities, 442 Franklin St., Kewanee, Ill. Specification Sheets. 734 x 1014 in. 40 pp. Illustrated. Detailed drawings and specifications covering water supply and sewage disposal systems.

#### SHELVING-STEEL

David Lupton's Sons Company, Philadelphia, Pa.
Lupton Steel Shelving. Catalog D. Illustrated brochure, 40 pp.,
85\( \text{x} 11 \) in. Deals with steel cabinets, shelving, racks, doors,
partitions, etc.

#### SOUND DEADENER

Cabot, Inc., Samuel, Boston, Mass.
Cabot's Deadening Quilt. Brochure 7½ x 10½ ins., 28 pp., Illustrated. Gives complete data regarding a well-known protection against sound.

#### STAINS-See Paints, Varnishes, Wood Finishes STEEL JOISTS

Massillon Steel Joist Co., Canton, Ohio.

Massillon Bar Joists. Pamphlet. 8½ x 11 in. 8 pp. Illustrated.

Describes the product and methods of its use.

Safe Loading Tables and Standard Specifications. Pamphlet.

8½ x 11 in. 8 pp. Gives standard Specifications for Massillon

Bar Joist Permanent Fireproof Floor and Roof Construction,
and safe loading tables for all spans from 4 feet to 30 feet 6
inches. It also gives detailed dimensions of the 21 standard bar
joists covering this range of span.

Handling and Erection of Massillon Bar Joists. Pamphlet.

8½ x 11 in. 12 pp. Illustrated. Intended chiefly to instruct
the contractor in the different methods of using the product.

#### STEEL JOISTS-Continued

Massillon Metal Lath. Pamphlet. 8½ x 11 in. 8 pp. Illustrated.
Detailed recommendations, with illustrations, regarding typical
methods of fireproofing steel joist floor construction, steel
columns and steel beams.

#### STONE, BUILDING

Indiana Limestone Quarrymen's Association, Box 766, Bedford, Ind.

Volume 3, Series A-3. Standard Specifications for Cut Indiana
Limestone work, 8½ x 11 in. 56 pp. Containing specifications
and supplementary data relating to the best methods of specifying and using this stone for all building purposes.

Vol. 1. Series B. Indiana Limestone Library. 6 x 9 in. 36 pp.
Illustrated. Giving general information regarding Indiana
Limestone, its physical characteristics, etc.

Vol. 4. Series B. Booklet. New Edition. 8½ x 11 in. 64 pp.
Illustrated. Indiana Limestone as used in Banks.

Volume 5. Series B. Indiana Limestone Library. Portfolio.
11¾ x 8¾ in. Illustrated. Describes and illustrates the use of
stone for small houses with floor plans of each.

#### STORE FRONTS

Brasco Manufacturing Co., 5025-35 South Wabash Avenue, Chicago,

Ill.
Portfolio. 8½ x 11 in. 32 pp. Illustrated. Selected examples of Brasco Copper Store Fronts suitable for different businesses and varying conditions of locations.

Catalog 28. 8½ x 10¾ in. 20 pp. Illustrated with plates. Details of Brasco Copper Store front construction. Also show-cases, ventilator sashes.

Detail Sheets. Set of five sheets giving details and suggestions for store front designing enclosed in envelope convenient for filing.

for store front designing enclosed in envelope convenient for filing.

Kawneer Co., The, Niles, Mich.

A Collection of Successful Designs. Catalog. 9½ x 6½ in. 64 pp. Illustrated. Showing by use of drawings and photographs many types of Kawneer Solid Copper Store Fronts.

Catalog L, 1925 Edition. 8½ x 11 in. 32 pp. Illustrated. Details of copper store front construction.

Metal Store Fronts. Sheets, 17 x 22 in. Draftsmen's details of copper store fronts for use in tracing.

Zouri Drawn Metals Company, Chicago Heights, Ill.

Zouri Safety Key-Set Store Front Construction. Catalog. 8½ x 10½ in. 60 pp. Illustrated. Complete information with detailed sheets and installation instructions convenient for architects' files.

nics.

1. To pp. Illustrated. Complete information with detailed sheets and installation instructions convenient for architects' files.

#### SWIMMING POOL EQUIPMENT & STERILIZATION

WIMMING POOL EQUIPMENT & STERILIZATION
R. U. V. Company, Inc., 383 Madison Avenue, New York City.
Water Sterilization by Means of Ultra Violet Rays. Booklet
8½ x 11 in. 16 pp. Full data on a system of purifying water.
Swimming Pool Sterilization. Booklet 8½ x 11 in. 24 pp. Describes a method purifying water in bathing pools.
Wallace & Tiernan Company, Newark, N. J.
The W. & T. Chlorometer, Technical Publication, No. 55. Booklet, 8½ x 11 in. 8 pp. Illustrated. A useful brochure dealing with the value of pure water and the importance of the

with the value of pure water a chlorination process in sterilization.

#### STUCCO, MAGNESITE

Muller & Co., Franklyn R., Waukegan, Ill. Everlastic Magnesite Stucco. Booklet. 8½ x 11 in.

#### TECHNICAL PAINTING

Toch Brothers, 110 East 42nd Street, New York City.

Specifications for Dampproofing, Waterproofing, Enameling and Technical Painting. Complete and authoritative directions for use of an important line of materials.

#### TERRA COTTA

PERRA COTTA

National Terra Cotta Society, 19 West 44th St., New York, N. Y. Standard Specifications for the Manufacture, Furnishing and Setting of Terra Cotta. Brochure 8½ x 11 in. 12 pp. Furnishing and Setting of Terra Cotta, consisting of complete detail Specification, Glossary of Terms Relating to Terra Cotta and Short Form Specification for incorporating in Architects' Specifications.

Color in Architecture. Revised Edition. Permanently bound volume 9½ x 12½ in., containing a treatise upon the basic principles of color in architectural design, illustrating early European and modern American examples. Excellent illustrations in color.

Present Day Schools. 8½ x 11 in. 32 pp. Illustrating 42 examples of school architecture with article upon school building design by James O. Betelle, A. I. A.

Better Banks. 8½ x 11 in. 32 pp. Illustrating many banking buildings in terra cotta with an article on its use in bank design by Alfred C. Bossom, Architect.

THERMOSTATS—See Heating Equipment

#### THERMOSTATS-See Heating Equipment

#### TILE, HOLLOW

National Fire Proofing Co., 250 Federal St., Pittsburgh, Pa. Standard Wall Construction Bulletin 174. 8½ x 11 in. 32 pp. Illustrated. A treatise on the subject of hollow tile wall con

Natco on the Farm. 8½ x 11 in. 38 pp. Illustrated. A treatise on the subject of fire safe and permanent farm building con-

Natco Homes and Garages. Booklet. 7 x 10 in. 32 pp. Illustrated, Showing the use of Natco Hollow Tile for private residences.

VACUUM CLEANING APPARATUS

The Spencer Turbine Company, Hartford, Conn.
Vacuum Cleaning Apparatus for all purposes.

Illustrated. Complete information on product, showing prominent buildings equipped with this system.



WM. L. WELTON, a leading Birmingham architect. Many of the most prominent structures in Birmingham—including such buildings as the Tutwiler Hotel and the Bankers' Bond Building—were designed by Mr. Welton.

# "In effect, we roof the coping"

says Wm. L. WELTON

"WE have in times past tried various measures to prevent leaks from developing around parapet walls," said Wm. L. Welton, prominent architect of Birmingham, Ala. "The coping on parapets expands about 1 inch for every 100 feet, and when contraction takes place vertical seams are opened up between coping blocks, making it possible for water to run down under the roofing.

"But we have encountered no trouble from this source since adopting the method of construction we are now using. In effect, we roof the coping. And we do it by bringing the flashing up over the top of the parapet wall, securing the outer edge in place with plugs and g. i. screws and expansion bolts. This is now a standard specification on all our flat roof construction."

Mr. Welton exercises the same care in the selection of materials to insure against roof leaks as in his methods of construction. And the fact that Carey Built-up Roofing is extensively used on buildings designed by him is an impressive tribute to Carey. Carey Built-up Roofs can always be depended on, for they are made only of first quality materials. The tough, long-fibred felt is absolutely free from "filler". The asphalt is specially refined and blended at the Carey plant to meet the strictest standards in melting point, hardness and ductility. That's why Carey roofs cover many of the best known buildings in the country—office buildings, hotels, auditoriums, factories. Write for full information.

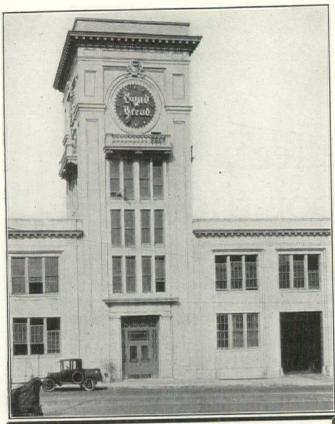
Note to architects: Send for our Architects' Specification Book.

#### THE PHILIP CAREY COMPANY

Lockland, Cincinnati, Ohio



"A ROOF FOR EVERY BUILDING"



Central section of the GENERAL BAKING COMPANY BUILDING, BROOKLYN, N. Y. Genasco Asphalt Mastic Flooring used on entire stable floor.

## A stable floor that is "stable"

The stability of Genasco Asphalt Mastic Flooring has been proved so often in buildings of so many different kinds. The fact that it is acid-resisting, waterproof, free from dust, easy to keep clean and sanitary, make it the one best floor for the new modern stable of the General Baking Company, in Brooklyn, N. Y.

Genasco Asphalt Mastic Flooring is as desirable for old buildings—factories, warehouses, etc.—as for new. It is easily laid over old floors, in one continuous unbroken sheet, with no interruption to business—a few hours and it is ready to

Genasco Asphalt Mastic Flooring is made with the famous Trinidad Native-Lake Asphalt—used in street paving all over the world for more than 50 years. Write us today for full information.

## The Barber Asphalt Company

Philadelphia

New York Chicago Pittsburgh St. Louis Kansas City San Francisco



#### SELECTED LIST OF MANUFACTURERS PUBLICATIONS-Continued from page 152

VAULT REINFORCING

Massillon Steel Joist Co., Canton, Ohio.

Massillon Bank Vault Reinforcing. Pamphlet. 8½ x 11 in.
8 pp. Illustrated. General information, with illustrations, on
typical bank vaults built with standardized steel reinforcing
frames. The system includes chairs, spacers, and tie bars,
complete and ready for the contractor to place in his forms
for pouring the concrete.

Crane Co., 836 S. Michigan Ave., Chicago, Ill.
No. 51. General Catalogue. Illustrated. Describes the complete line of the Crane Co.
Illinois Engineering Co., Racine Ave., at 21st St., Chicago, Ill.
Catalog. 8½ x 11 in. 88 pp. Illustrated.
Jenkins Bros., 80 White Street, New York.
The Valve Behind a Good Heating System. Booklet 4½ x 7¼ in.
The Valve Behind a Good Heating System. Radiator Valves for steam and hot water, and brass valves used as boiler connections.

for steam and hot water, and brass valves used as bones connections.

Jenkins Valves for Plumbing Service. Booklet. 4½ x 7½ in.

16 pp. Illustrated. Description of Jenkins Brass Globe, Angle Check and Gate Valves commonly used in home plumbing, and Iron Body Valves used for larger plumbing installations.

Mueller Co., Decatur, Ill.

Catalog G, 8 x 11 in., 316 pages. Profusely illustrated. Contains full data on plumbing, water and gas brass goods, including valves, faucets, traps, regulators, built-in bath equipment, and automatic systems of hot water control. Complete details are presented with a number of data sheets showing roughing-inmeasurements for built-in bath equipment.

#### VARNISH-See Paints, Stains, Varnishes

VENETIAN BLINDS

Burlington Venetian Blind Co., Burlington, Vt.
Venetian Blinds. Booklet, 7 in. x 10 in., 24 pages. Illustrated.
Describes the "Burlington" Venetian blinds, method of operation, advantages of installation to obtain perfect control of light in the room.

#### VENTILATION

Duriron Company, Dayton, Ohio.

Acid-proof Exhaust Fans. Folder, 8 x 10½ ins., 8 pp. regarding fans for ventilation of laboratory fume hoods Specification Form for Acid-proof Exhaust Fans. For 8 x 10½ ins. Data

Specification Form for Acid-proof Exhaust Fans. Folder, 8 x 10½ ins.

Globe Ventilator Company, 205 River Street, Troy, N. Y.

Globe Ventilators Catalog. 6 x 9 in. 32 pp. Illustrated profusely. Catalog gives complete data on "Globe" ventilators as to sizes, dimensions, gauges of material and table of capacities. It illustrates many different types of buildings on which "Globe" ventilators are in successful service, showing their adaptability to meet varying requirements.

Peerless Unit Ventilation Company, Long Island City, N. Y.
Peerless Unit Ventilation Company, Long Island City, N. Y.
Peerless Unit Ventilation Company, Long Island City, N. Y.
Illustrated. Valuable data on apparatus for ventilating and heating buildings of different types.

Van Zile Ventilating Corporation, 280 Madison Avenue, New York, N. Y.
The Ventadoor Booklet. 6½ x 3½ in. 16 pp. Illustrated. Describes and illustrates the use of the Ventadoor for Hotels, Clubs, Offices, etc.

#### WALLPAPER

Wallpaper Mfrs. Assn., 461 Eighth Avenue, New York.
Wallpaper Magazine. Illustrated. 8 x 11 in. 32 pp. Published
monthly to acquaint architects and interior decorators with
many interesting and decorative uses for wallpaper.

#### WATERPROOFING

Carey Company, The Philip, Lockland, Cincinnati, Ohio.
Waterproofing Specification Book. 8½ x 11 in. 52 pp.
The General Fireproofing Company, Youngstown, Ohio.
Waterproofing Handbook. Booklet. 8½ x 11 in. 72 pp. IllusWaterproofing Handbook. Booklet. 8½ x 11 in. 72 pp. Illustrated. Thoroughly covers subject of waterproofing concrete,
wood and steel preservatives, dustproofing and hardening concrete floors, and accelerating the setting of concrete. Free
distribution.
A. C. Horn Company, Long Island City, N. Y.
Waterproofing. Folder. 9½ x 11½ in. Contains folders giving
data on excellent waterproofing and dampproofing materials.
Master Builders Company, Cleveland, Ohio.
Mastertex: Waterproof Cement Paint in Colors. Folder 10½ x
12½ inches.

Ruberoid Co., The, 95 Madison Ave., New York.
Ruberoid Co., The, 95 Madison Ave., New York.
Impervite. Circular. 8½ x 11 in. 4 pp. Illustrated. An integral water-proofing compound for concrete, stucco, cement, mortar,

etc.

Sandusky Cement Co., Dept. F., Cleveland, Ohio.

Medusa Waterproofing. Booklet. 634 x 9 in. 38 pp. Illustrated.

Sommers & Co., Ltd., 342 Madison Ave., New York City.

"Permantile Liquid Waterproofing" for making concrete and cement mortar permanently impervious to water. Also circulars on floor treatments and cement colors. Complete data and specifications. Sent upon request to architects using business stationery. Circular size, 8½ x 11 in.

Somneborn Sons, Inc., L., 116 Fifth Ave., New York, N. Y.

Pamphlet. 334 x 834 in. 8 pp. Explanation of waterproofing principles. Specifications for waterproofing walls, floors, swimming pools and treatment of concrete, stucco and mortar.

Toch Brothers, 110 East 42nd Street, New York City.

Specifications for Dampproofing, Waterproofing, Enameling and Technical Painting. Complete and authoritative directions for use of an important line of materials.



# The Architect and "Cal" Pine Discuss Siding and Exterior Trim

"Now then, 'Cal' Pine, tell me, in what ways can California Pine be used to best advantage as siding and exterior trim?"

"Well, for exterior wall coverings, California Pine lends itself readily to artistry in design. Its soft, uniform texture and close, even grain assure sharp, clean edges, accurate contouring and permit close fitting. "California Pine is obtainable in all widths of bevel, wide Colonial and every pattern of 'drop' siding. Porch columns, pilasters, newell posts, mouldings and all sorts of trim are readily milled from this soft-textured wood.

"And you can depend on California Pine to preserve accuracies of construction and fitting, owing to its freedom from warping, end-shrinking and twisting."

"How about nail-holding and paint-taking qualities, 'Cal' Pine?"

"You have touched upon two of the outstanding advantages of California Pine. You can drive nails

anywhere in California Pine siding or trim and they will hold tight without splitting. California Pine is a 'smooth' painting wood and readily takes any color paint because of the light natural color of the wood. Paint-oils are readily absorbed and retained, thus requiring less frequent re-painting."

"What are the standard grades of California Pine siding?"

"Well, Bevel Siding comes in four grades—'B and Better,' 'C,' 'D,' 'E.' Drop Sidings are milled from either 'Select' or 'Common' grades. And there is wide Colonial milled from the same grades of California Pine as Bevel Siding.

"Send for a free copy of my illustrated book of grades. It also contains full information on sizes and uses of California Pine lumber and is a mighty valuable working tool for the drafting room."

CALIFORNIA WHITE AND SUGAR PINE MANUFACTURERS ASSOCIATION

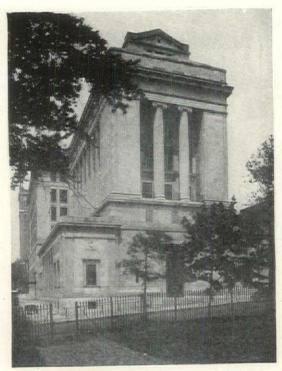
Also producers of CALIFORNIA WHITE FIR · CALIFORNIA DOUGLAS FIR · CALIFORNIA INCENSE CEDAR

654 CALL BUILDING, SAN FRANCISCO

californiaPINE

California White Pine (tradename)

California Sugar Pine



Federal Reserve Bank, Richmond, Va. Ventilated through Midwest Air Filters

### Only Complete Performance Data Determines Air Filter Superiority

The merits of any air filter can be properly determined only by what it does and how much it costs to operate, as demonstrated by actual installations in service long enough to bring out its real operating characteristics.

The theoretical superiority of Midwest Air Filters is being demonstrated to be an actual superiority by the series of reports now being made by a well-known firm of engineers on Midwest installations in service a year or more.

These reports submit unbiased performance data for your consideration. Operating costs include every item that should be considered—depreciation, interest on the investment, power consumed, etc., as well as the cost of labor and recharging fluid. Actual results accomplished are detailed, and operating characteristics noted after a year or more of service are reported.

A number of these reports are now ready for distribution. They include, besides one on the Book-Cadillac Hotel installation, a report on the Federal Reserve Bank, of Richmond, Va., and several more on industrial plants, such as the Flint Motor Company, and a large Eastern steel plant.

Dept. AF will be glad to send any number of copies of each report, as you may request



BRADFORD, PA. Offices in Principal Cities

THE MANAGEMENT OF THE STATE OF

### SELECTED LIST OF MANUFACTURERS PUBLICATIONS—Continued from page 154

Chamberlin Metal Weather Strip Company, 1644 Lafayette Boulcvard, Detroit, Mich.
Chamberlin Metal Weather Strip Details, 1925 edition. Catalog 8½ x 11 in. 48 pp. Complete specifications and full-sized details. With or without 9 x 11¾ in. folder conforming to A. I. A. filing system. May also be used in loose leaf form.
Excluding Cold and Dust with Chamberlin for 32 years. Booklet 5½ x 7¾ in. 16 pp. Illustrated. Completely and interestingly illustrates application of Chamberlin equipment.

The Higgin Manufacturing Co. Newport Ky.

The Higgin Manufacturing Co., Newport, Ky.
Higgin All-Metal Weather Strips. Booklet. 6 x 9 in. 21 pp.
Illustrated in colors. Describes various types of Higgin Weather
Strips for sealing windows and doors against cold and dust.

David Lupton's Sons Company, Philadelphia, Pa.
Lupton Pivoted Sash, Catalog 12-A. Booklet 48 pp. 85% x 11 in.
Illustrates and describes windows suitable for manufacturing buildings. WINDOWS

WINDOWS, CASEMENT
Richards-Wilcox Mfg. Co., Aurora, Ill.
Casement Window Hardware. Booklet. 24 pp. 8½ x 11 in.
Illustrated. Shows typical installations, detail drawings, construction details, blue-prints if desired. Describes AIR-way Multifold Window Hardware.

Crittall Casement Window Co., 10951 Hearn Ave., Detroit, Mich. Catalog No. 22. 9 x 12 in. 76 pp. Illustrated. Photographs of actual work accompanied by scale details for casements and composite steel windows for banks, office buildings, hospitals and residences.

And residences.

Hope & Sons, Henry, 103 Park Ave., New York, N. Y.
Catalog. 12¼ x 18½ in. 30 pp. Illustrated. Full size details of outward and inward opening casements.

David Lupton's Sons Company, Philadelphia, Pa.
Lupton Casement of Copper-Steel. Catalog C-122. Booklet 16 pp. 8½ x 11 in. Illustrated brochure on casements, particularly for residences.

WINDOWS, STEEL AND BRONZE
The Kawneer Company, Niles, Mich.
Kawneer Simplex Windows. Catalog. 8½ x 10½ in. 16 pp.
Illustrated. Complete information, with measured details, of
Kawneer Simplex Weightless Reversible Window Fixtures,
made of solid bronze. Shows installations in residences and
buildings of all sorts.
Detail Sheets and Installation Instructions. Valuable for architects and builders.
Metal Windows. Catalog. 8½ x 11 in. 18 pp. Illustrated.
Features double-lining and casement windows of metal.

David Lupton's Sons Company, Philadelphia, Pa.
A Rain-shed and Ventilator of Glass and Steel.
Pamphlet, 4 pp.
85% x 11 in. Deals with Pond Continuous Sash, Sawtooth
Roofs, etc.
How Windows Can Make Better Homes. Booklet. 3¾ x 7 in.
12 pp. An attractive and helpful illustrated publication on use
of steel casements for domestic buildings.

Truscon Steel Company, 250 W. Lafayette Blvd., Detroit, Mich.
Truscon Steel Windows. Catalog. 8½ x 11 in. 80 pp. Illustrated. Contains complete data on all types of Truscon Steel
Windows.

WOOD—See also Millwork

WOOD—See also Millwork American Walnut Mfrs. Association, 618 So. Michigan Blvd., Chi-

American Walnut Mfrs. Association, 618 So. Michigan Blvd., Curcago, Ill.

American Walnut. Booklet. 7 x 9 in. 45 pp. Illustrated. A very useful and interesting little book on the use of Walnut in Fine Furniture with illustrations of pieces by the most notable furniture makers from the time of the Renaissance down to the present.

Real American Walnut Furniture. Folder. 8½ x 11 in. 4 pp. Illustrated. Tells how to identify the genuine and avoid the substitute in buying "Walnut" furniture.

substitute in buying "Walnut" furniture.

California White and Sugar Pine Mfrs. Assn., San Francisco, Calif. Information Sheet No. 1, California White Pine; Information Sheet No. 2, California Sugar Pine. Illustrated booklets 8 x 10½ in. First of a series of Information Sheets on these woods and their uses for construction and finish.

Introducing "Cal" Pine, Guardian of the Grades. Booklet, 50 pp., 7¾ x 10¾ ins. Illustrated. Valuable data on siding, battens, flooring, mouldings, etc.

A series of information sheets on California White Pine, Sugar Pine, California White Fir, Douglas Fir and Incense Cedar. Technical data as to supply, production, quantities, uses, grades and sizes of all lumber products of the mills in the Association. Furnished with standard size filing folder for easy reference. Information sheets are 8 x 10½ in. text matter is arranged in uniform style.

Curtis Companies Service Bureau, Clinton, Iowa.

is arranged in uniform style.

Curtis Companies Service Bureau, Clinton, Iowa.

Better Built Homes. Vols. XV-XVIII, incl. Booklet. 9 x 12 in.
40 pp. Illustrated. Designs for houses of five to eight rooms, respectively, in several authentic types, by Trowbridge & Ackerman, architects, for the Curtis Companies.

Long-Bell Lumber Co., Kansas City, Mo.

The Perfect Floor. Booklet 5½ x 7¾ in. 16 pp. Illustrated. Valuable for the data given on the use of wood for floors.

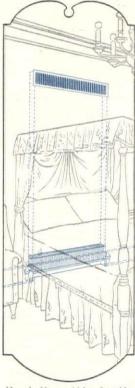
Saving Home Construction Costs. Booklet 4½ x 7½ in. 24 pp. Discusses economy and value in domestic building.

Experiences in Home Building. Booklet 6 x 9 in. 16 pp. Records the testimony of a number of builders and contractors as to the value of certain materials.

The Post Everlasting. Booklet 8 x 11 in. 32 pp. Illustrated. Describes the production of posts and their use in various ways.

WOOD FINISHES-See Paints, Varnishes, Stains





How the Herman Nelson Invisible Radiator fits in the wall is shown by this phantom view

Applied to Room Designed by MARSHALL FIELD & COMPANY . Chicago

HERMAN NELSON Invisible RADIATOR  $T^{\mbox{\scriptsize HINK}}$  of a radiator only 3½" deep—so small that it may be installed in any 4" wall. Occupying no floor or wall space, it permits of unrestricted arrangement of furniture.

The Herman Nelson Invisible Radiator removes all necessity for screens and ornamental boxes, which waste space, complicate control and lessen radiator efficiency.

leak, rust or be harmed by freezing, and so dependable that it can be forever forgotten. Year after year this radiator in our Univent School Ventilators has given dependable service in all parts of the country, where temperatures frequently reach 20° to 40° below zero.

Write for our beautifully illustrated book visualizing the application of the Herman Nelson Invisible Radiator, to show your clients as well as data book, It is so indestructible that it cannot showing the simplicity of installation.

THE HERMAN NELSON CORPORATION, Moline, Ill.

Builders of successful Heating and Ventilating Equipment for 20 years

Sales and Service

BELFAST, ME. BOSTON NEW HAVEN NEW YORK CITY SYRACUSE

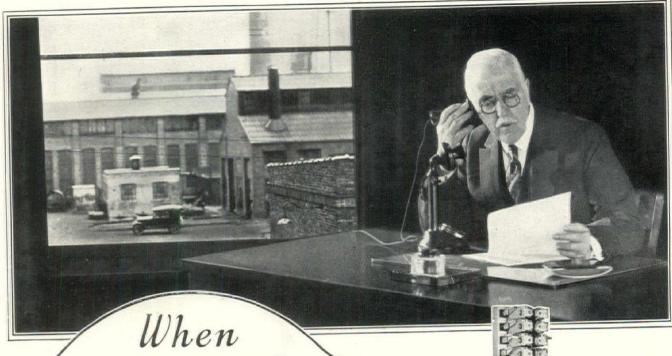
C

PHILADELPHIA SCRANTON PITTSBURGH GRAND RAPIDS DETROIT

CLEVELAND COLUMBUS TOLEDO TOLEDO INDIANAPOLIS CHICAGO DES MOINES MILWAUKEE MINNEAPOLIS ST. LOUIS EMPORIA

OMAHA KANSAS CITY DENVER SALT LAKE CITY SAN FRANCISCO

SPOKANE PORTLAND SEATTLE VANCOUVER TORONTO



When
UNIFORMITY
Counts

Which your Private Exchange Operator can properly handle during a given time. It is humanly impossible for her to maintain uniformly prompt service at all times because of the fluctuations in the load of incoming, outgoing and interior calls. Just at that point in the day's procedure when you find it most essential to secure an important connection promptly, she may be so heavily burdened with interior telephone traffic that your call is delayed.

Safeguard the efficiency of your operator by providing equipment that will enable her to handle the peak load of calls with facility and certitude. Relieve her of the strictly mechanical work of setting up interior connections. Place the burden of interior calls on the P-A-X. Because its connections are made instantly, accurately and automatically, it insures uniform service every hour in the day and every day in the year.





The "operator" of all P-A-X systems is the "connector" shown above. This mechanism has been in use in public automatic exchanges for a quarter of a century, doing all of the work formerly done by operators, but with unfailing accuracy and lightning speed.



The P-A-X is, fundamentally, a private automatic telephone exchange built of the same Strowger type of automatic telephone equipment being so widely adopted for city service. The P-A-X may be furnished to include and co-ordinate such services as code-call, conference, executive's priority, emergency alarm, etc., to meet individual needs.

# Automatic Electric Inc.

Engineers, Designers and Manufacturers of the Automatic Telephone In Use the World Over. Home Office and Factory, CHICAGO, ILL. Branch Offices in all principal cities.





### THE DINING ROOM

Nothing is more annoying or more embarrassing to your clients than a cold or chilly dining room. Such a thing is contrary to the best health rules and decidedly a faux pas in society.

Who wants to shiver through a full course dinner - what hostess wants to be constantly embarrassed when entertaining.

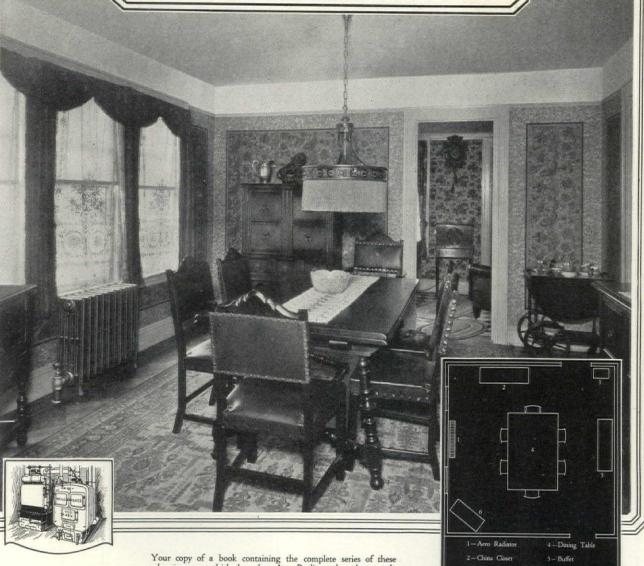
With Aero Radiators on the job your clients are assured constant comfort, an even, steady flow of healthful warmth, absolute cleanliness

and general self satisfaction in poise, dignity and peace of mind.

Yet all of this does not recount the beautiful, graceful slender lines and the pleasing proportions of Aero Radiators nor the fact that with all these advantages Aero Radiators still sell at the same standard price as the old radiator types.

Send for literature.

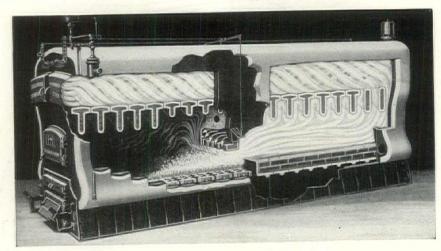
### NATIONAL RADIATOR COMPANY JOHNSTOWN, PA. New York Philadelphia Baltimore Washington Richmond Pittsburgh Cincinnati Cleveland Chicago



Your copy of a book containing the complete series of these advertisements, which shows how Aero Radiators have been made an integral part of the furnishings, will be sent free upon request.

This floor plan shows how the furniture was placed to make this dining room charming and beautiful.





UTICA-IMPERIAL

### SUPER SMOKELESS BOILERS

"The Standard of Smokeless Boilers"

### BURN SMOKE AS FUEL!

Utica-Imperial SUPER-SMOKELESS Boilers not only burn soft coal smokelessly, but attain remarkable heating efficiency even with the cheaper grades of soft coal. This is accomplished by admitting heated air to the fire, on the principle of the Bunsen Burner, and converting smoke and soot into fuel of remarkable heating value. The smokelessness and economy of SUPER-SMOKELESS Boilers have been demonstrated in thousands of installations.

### UTICA HEATER COMPANY, Utica, N. Y.

"Pioneers in Smokeless Combustion"

Sales Offices in the Principal Cities

D2-10



AIRKORE FIRE DOORS

SEND FOR DESCRIPTIVE CATALOGS

THE J. G. WILSON CORPORATION, 11 E. 38TH ST., N. Y. C.

HOME IS WHERE THE HART IS



### Facts no architect can afford to forget

To think of heating solely in terms of radiation and room temperature is to overlook two of the most conspicuous benefits of the Hart Oil Burner. These are convenience and cleanliness, factors of major importance to any woman who presides over a home.

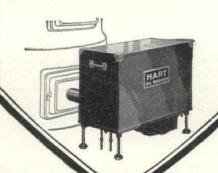
Of even greater importance to both men and women is the unfailing reliability of the Hart Oil Burner. Listed as standard by Underwriters' Laboratories, Inc. Can be attached to any heating plant, hot air, hot water, steam or vapor, in five hours' time.

Every architect knows that a modernized heating plant is an asset which bears directly on the value of any man's investment in a home. Your clients will appreciate being fully advised about the Hart Oil Burner. The facts are covered in a fine booklet which will be gladly forwarded upon request.

W. B. WILDE Co., Peoria, Illinois

Hart Electric Icer

An improved electric refrigerator built in sizes to suit requirements. Send for booklet



The Hart Dealer in your city will be glad to give full information without placing you under the least obligation

## HARTOILBURNER

W. B. WILDE CO. 2148 North Adams Street, Peoria, Illinois You may send me, without cost or obligation:

☐ Latest booklet on Oil Heating.

☐ Booklet on the Hart Electric Icer.

Name

Street

City.....

...State

# To the man who writes specifications

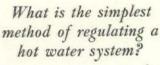
Answering your questions about automatic regulation of hot water heating plants



Does a hot water heating boiler need automatic regulation?

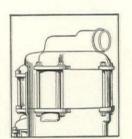
Yes. No hot water plant can perform satisfactorily, day in and day out, if dependent upon man-

ual control. The "system" companies, who specialize in hot water heating, use automatic regulation as standard equipment.



Through the use of a "Damper Regulator" attached directly to the boiler. This keeps the

water in the system at any desired temperature by automatically regulating the damper.



Do boiler manufacturers supply a regulator with a hot water boiler?

No, manufacturers do not supply regulator except in a few isolated cases. To make sure that your client

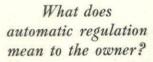
has this refinement, you must include a water regulator in your specifications.



Does a water regulator add materially to the cost of a hot water system?

No. An Arco Water Regulator saves its initial cost each season and lasts as long as the boiler. By in-

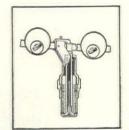
cluding an Arco Water Regulator in your specifications, you give the owner a refinement which costs him nothing in the end.



Relief from fussing with the damper—and from thousands of needless trips to the basement. An

owner is quick to appreciate the convenience of automatic regulation.





The Arco Water Regulator
No. 800

Attached to any hot water boiler, this device keeps the water at the desired temperature more accunately than is possible by

hand control. It never forgets—never sleeps. Small size for tank heaters No. 801.

The ARCO WATER REGULATOR is one of many heating accessories made and guaranteed by

### AMERICAN RADIATOR COMPANY

Specialties Department

816 S. Michigan Avenue

Chicago, Ill.



### You will want to have copies of this book for your clients

INTENDED originally to clarify many phases of the heating problem to the layman, there are many chapters in this book which will assist you in explaining the technical reasons for your recommendations.

Some of the most interesting chapters that will help you simplify phases of this important problem are: -

How Much Should the Heating System Cost in Relation to the Total Building Investment?

What Part in the Operating Budget?

Heat for the Home

Heating Systems

Heat for Other Kinds of Buildings

You may have as many copies as you wish to give to your clients, or we shall be glad to mail them directly to them in your name.

# steam, vapor or hot water burns No.1 Buckwheat coal



SPENCER HEATER COMPANY General Offices: WILLIAMSPORT, PA.

New York City Boston Philadelphia Baltimore Buffalo Rochester Hartford Washington Detroit Schenectady Syracuse Harrisburg Scranton



SELF CLEANING CARTON FURNACE

had adad ad ad a

Home of Louis Mosenfelder, Rock Island, Ill.; Cervin & Horn, Rock Island, architects. Warmed with a Carton Self Cleaning Furnace No. 583.



Self Cleaning—even with soft coal

This is the Carton's SELF-CLEANING RADIATOR. Soot cannot accumulate in this radiator, and any dust or ashes carried up there will fall back onto the fire.



THE International Carton is the ideal furnace for finer homes, anywhere. And especially where soft coal is used for domestic fuel!

For the Carton cleans itself. Its radiator is so designed that all soot drops back into the flames to be consumed.

So certain is this action that there is no clean-out door on the International Carton.

And when your client realizes that one-eighth of an inch of soot on any heating surface reduces its efficiency 28 per cent, it makes one more powerful reason for specifying the Carton in every home of the finer type.

Every last detail of the International Carton, from the smallest casting to the large durable casing is designed and built to heat efficiently, and to endure.

Installed according to the Standard Code, the Carton will give your clients an ideal heating system as long as the house itself endures. Architects—heating engineers—become thoroughly acquainted with the Carton. Send for Catalog 1818-F.

INTERNATIONAL HEATER CO. UTICA, N. Y.

Cleveland Chicago Detroit New York City Nashua, N. H.

# INTERNATIONAL

STEAM AND HOT WATER BOILERS, WARM AIR FURNACES AND ONEPIPE HEATERS



Residence of Mr. John Nyden, Architect, Evanston, Ill. C. J. McDonough Company, Heating Contractors

# -when the profession builds for itself!



The Webster Type "W" Modulation Valve

Used with the Webster Modulation System of Steam Heating to provide complete control of each radiator. By its use the radiator may be kept one-quarter or one-half filled — thus meeting the most exacting requirements of each occupant.

In thirty-eight years more than thirty-seven thousand Webster Systems of Steam Heating have been installed in hotels, schools, office buildings—apartments and private residences... In our files of completed work are the names of buildings of national and international fame... Yet, nothing in our records do we prize more highly than the long and growing list\* of Webster Systems of Steam Heating installed by architects, engineers and heating contractors in their own homes and business properties.

\*List will be furnished on reduest.

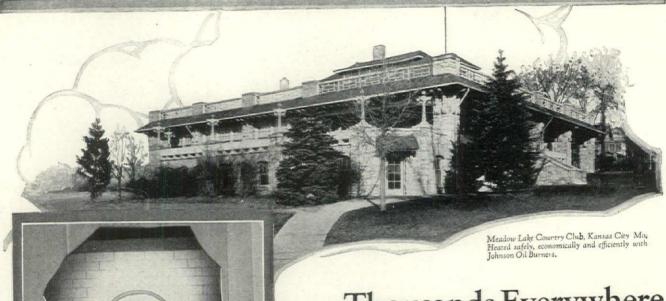
Warren Webster & Company

Pioneers of the Vacuum System of Steam Heating Camden, N. J. 50 Branch Offices

In Canada, Darling Bros., Ltd., Montreal



More than 37,000 installations in America's finer buildings



Thousands Everywhere are giving Satisfactory Service

### JOHNSON OIL BURNERS

OIL BURNERS manufactured by the S. T. Johnson Co. have been giving satisfactory service for 20 years—East, North, South, West, and in foreign countries.

Architects have specified many important Johnson installations. The S.T. Johnson Co. is justly proud of the esteem in which its Burners are held by the Profession.

And now—the famous Johnson Rotary Burner is available with full automatic control. We have prepared an attractive new booklet describing this wonderful burner. May we send you a copy?

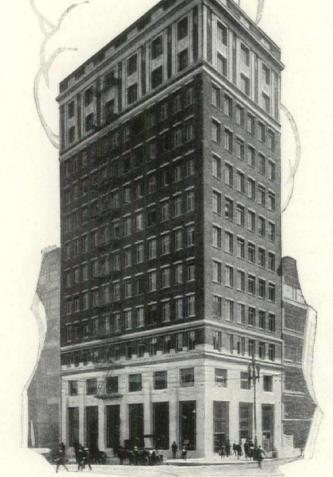


# S. T. JOHNSON CO. OIL BURNERS FOR EVERY SERVICE

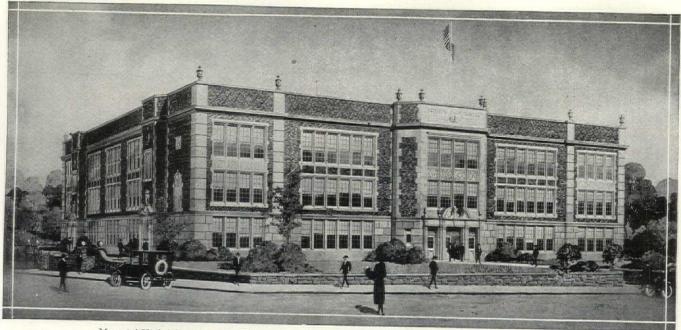
Main Office and Factory: 940-950 Arlington Avenue Oakland, California Factory Branch Offices: San Francisco Sacramento Philadelphia

Distributors and Dealers Throughout the United States and in Foreign Countries

16-626



Santa Fe Building, San Francisco, California H. G. Simpson, Architect. Oil Burners installed by S. T. Johnson Co.



Memorial High School, West New York, N. J. Equipped throughout with PeerVent Heating and Ventilating Units. Architect, Wm. Mayer, Jr. Contractors, Ricker & Kuehler. Mr. Mayer was one of the first architects to adopt the Unit System. Since his first installation ten years ago he has been a constant advocate of Peerless and PeerVent Units.

### Do Architects Read Catalogues?

RCHITECTS will not bother to send for catalogues," said an advertising man.

But Architects have "bothered" to send for the PeerVent Catalogue. And, as a result, they have specified hundreds of PeerVent Heating and Ventilating Units.

There is nothing special about the PeerVent Catalogue in itself. It simply tells the complete story of PeerVent Heating and Ventilating Units, with plenty of pictures, detail drawings, adaptations to

special requirements, and twenty-seven pages of useful tables.

But there is something special about PEERVENT UNITS. In addition to all the well-known advantages of the Unit System, they have exclusive features of design and construction, resulting from 12 years' experience in this field, which would be expected from the "pioneers in unit ventilation".

Send for the PeerVent Catalogue and list of installations. If you wish to see our local representative, please so state.

### PEERLESS UNIT VENTILATION CO., INC.

Pioneers in Unit Ventilation Skillman Avenue and Hulst Street Long Island City, N. Y.

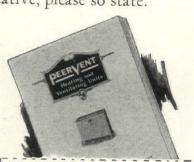
CHICAGO 808 Monadnock Bldg. BOSTON 100 Boylston St. SPRINGFIELD, MASS. 196 Worthington St.

PITTSBURGH 301 Hou e Building CLEVELAND 1836 Euclid Avenue DETROIT 723 Lafayette Bldg.

DES MOINES 520 Securities Building PORTLAND, ORE. 927 Board of Trade Bldg. MINNEAPOLIS 240 7th Avenue South

TORONTO, CANADA, Darling Bros., Ltd., 77 York St.

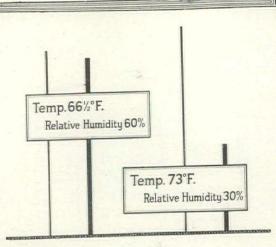




Mail This Coupon for Catalogue

Name	**
Address	

Heating and Ventilating Units



### HY the Room with Lower Temperature seemed Warmer

Here is the result of a scientific test made by Henry M. Smith and reported some time ago in American Gas Light Journal: One room was heated to 66½° Fahrenheit and the moisture content of the air was kept at 60%. The temperature of an adjoining room was raised to 73° and the humidity reduced to 30%.

Persons who did not know the actual conditions declared in every instance that the first room—with temperature 61/2° was warmer and more comfortlowerable.

The Kelsey Warm Air Generator, a scientifically constructed and efficient heater, is equipped with an Automatic Humidifier. This keeps the air supplied with just the right percentage of moisture for comfort, without any attention all winter long.

It guards health, too, by preventing colds, headaches and other ills that are caused by excessive dryness.

We shall be glad to send you a booklet of facts about Kelsey Health Heat—for homes, churches and schools. Our Engineering Department offers the architect full co-operation in preparing plans and specifications.

## WARM AIR GENERATOR

251 James St., Syracuse, N. Y.

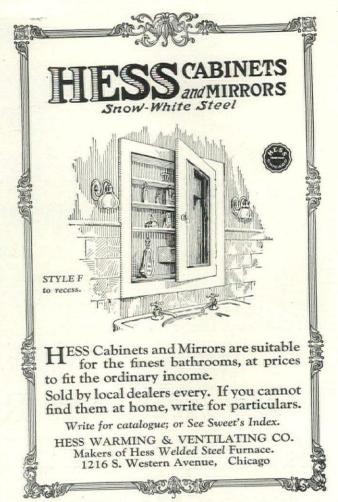
Sales Offices

Boston 60 Sudbury St. Brockville, Canada

New York 565 Fifth Ave.

Dealers Principal Cities

KELSEY (Trade Mark Reg. U. S. Pat. Off.)



### ARCHITECTS



Let us help You solve your problems on Incinerators.

We maintain a highly competent engineering staff for preliminary service to architects. You are invited to consult us on incineration problems. No obligation.

### Waste Disposal Systems

are operating successfully in practically every kind of hotel, hospital, apartment building, home, department store, factory, industrial plant, etc.

A style and size for every kind of building. Patented features. Costs the least in every way.

Folder just fits your File 35-J-41 Sent without any obligation

GODER INCINERATOR CORP.

319 N. Michigan

CHICAGO



Kingsford Junior High School, Iron Mountain, Michigan. F. E. & G. F. Parmelee, Iron Mountain, Michigan, Architects

# Architect of Lives

Upon the architect even more depends than beauty, comfort and structural greatness in buildings. Through his foresight and ideals of perfection—through his optimism—finally, through his insistence upon the creation of new and finer methods-come the vital improvements that build up greater human health and happiness.

It was by such, the architect's ideals, that the Univent system of ventilation was inspired. Ventilation that combines sound engineering principles with those of modern hygiene. Ventilation that is as nearly perfect as human skill can make it.

The Univent draws fresh air from outdoors, cleans it, warms it, and distributes it gently yet evenly throughout the room—without draft. If you are interested in the planning of schools, hotels, office and similar buildings, write for the book, "Univent Ventilation," architect's edition.



Manufactured only by

### THE HERMAN NELSON CORPORATION Moline, Ill.

BELFAST, ME BOSTON NEW HAVEN NEW YORK CITY SYRACUSE

PHILADELPHIA SCRANTON PITTSBURG GRAND RAPIDS DETROIT

CLEVELAND COLUMBUS TOLEDO

Sales and Service DES MOINES MILWAUKEE MINNEAPOLIS INDIANAPOLIS ST. LOUIS

EMPORIA OMAHA KANSAS CITY DENVER SALT LAKE CITY

SPOKANE PORTLAND SEATTLE VANCOUVER TORONTO

CHICAGO

SAN FRANCISCO

# A National Skyline of Dunhamized Hotels







Top, left to right: Wolverine, Detroit. Redn.ont, B'rmingham. Hamilton, Washington, D. C. Vendig, Philadelphia Ambassador, N. Y. City.

Philadelphia Ambassador, N. Y. City. Left, reading down: Neill, Columbus, O. Fort Des Moines, Des Moines,

## From Coast to Coast and "'Way Down in Alabamy" Travelers Enjoy Dunham Heating Comfort

HEN a firm of architects adopts and specifies, over a varying period of years, the same certain equipment for a chain of buildings scattered throughout the country, but all emanating from their offices, it may well be a matter of satisfaction and pride to the manufacturer of that equipment.

However, the meaning of such architectural approval of the value and efficiency of any equipment is largely augmented if a large number of architectural firms in widely removed centers continuously select that product or equipment.

That is the testimony offered by this page of famous hostelries: Fourteen separately owned hotels in thirteen different states or provinces out of the office of fourteen different architects. Each of these fourteen architects in thirteen states specified Dunham in order to meet the insistent demand for patronsatisfaction, through heating comfort, as silent as it is even and constant.

That's Dunham.

Over sixty branch and local sales offices in the United States and Canada bring Dunham Heating Service as



close to your office as your telephone. Consult your telephone directory for the address of our office in your city

### C. A. DUNHAM CO.

Dunham Building

Mimeapolis.

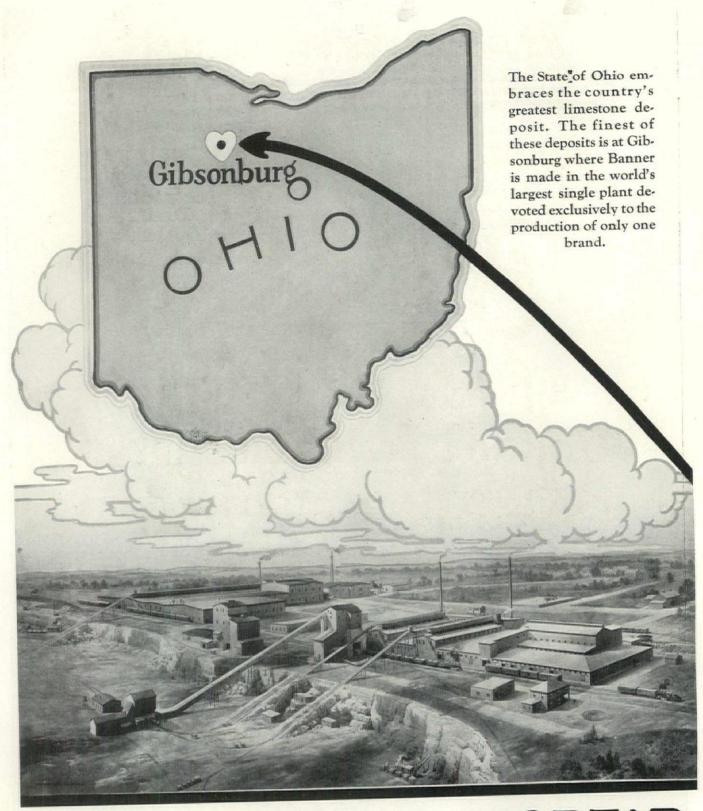
450 East Ohio Street - Chicago

Lover, lett to right:
Sul Utah.
Sul Utah.
Shermant, Chicago, Morrison, Chicago.
Morrison, Chicago.

# American Rlower

Equipment After all-no product is better than the organization American Blower Company Detroit USA

Photograph Shows Large Disc Fan for Use on Cooling Towers





# NATIONAL MORTAR Federal Reserve Building

"Easy to Spread ~

The country's smoothest, hardest, and most enduring walls are finished with

Banner

a finish that is scientifically produced right where it is quarried/

> in the heart of the world's finest limestone deposit

8 SUPPLY COMPANY Pittsburgh, Pa,

~Hard to Beat!"





FOR QUALITY INSURANCE IN THE PROCESS INDUSTRIES

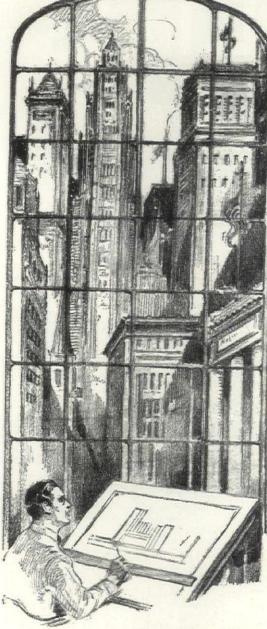
O great is the need for absolute purity that the use of Pure Nickel tubing in the process industries is becoming common practice. It will not contaminate the product, and it is easily cleaned. Corrosion, rust or severe use do not impair its value.

Our engineers, with their extensive experience in solving corrosion problems, are in a position to give you valuable help in adapting Pure Nickel—in the form of tubes, rods, sheets, etc.—to your manufacturing processes and your equipment-building problems. This service is available on request without cost to you. Why not drop us a line today?

SEND FOR STOCK LISTS AND PRICE SCHEDULES.

THE INTERNATIONAL NICKEL COMPANY, 67 WALL STREET, NEW YORK CITY

Converting Ideas and Plans
Into Reality



Advantages of the Smith Plan

- Complete and permanent financing arranged at outset.
- 2. Disbursements on architect's certificates as construction progresses.
- Full co-operation of our staff to assure economical construction and maximum earning capacity of structure.
- 4. Architect's ideas carried out.
- 5. Equitable terms—fair to borrower, banker and investor.

1050

HE architect's trained mind evolves a plan for an apartment building, office building, or other structure. The plan is advanced to a working basis on sketches or blue prints.

But... only when finances have been assured for the completion of the project can the architect's plans be carried out and he be recompensed for his skill and effort.

It is for this reason that successful architects now maintain close contact with national organizations specializing in underwriting first mortgage construction loans.

The F. H. Smith Company has completed more than a half century of satisfactory service to first mortgage borrowers and investors.

If you are planning the erection of an incomeproducing building, needing financing of \$200,000 to \$1,000,000 or more, we shall be glad to have you communicate with us.

The Smith plan provides both construction and permanent financing at one time, and thus there is no uncertainty about the renewal of short-term loans. The final cost of financing, like the cost of every other element of building construction, is known at the outset.

Our staff of experts is at your service, insuring to you and your clients intelligent and generous cooperation.

### THE F. H. SMITH CO.

Founded 1873

SMITH BUILDING - - - WASHINGTON, D.C.

NEW YORK — PHILADELPHIA — PITTSBURGH — BOSTON — BUFFALO — ALBANY — MINNEAPOLIS



0 BONDS

> HAS ART DECORATIVE MODERY PERFECT EXPRESSION ITS MATERIAL FOR EVIDENT UPOR WILL BECOME VISITING SHOW BEAUTIFUL ROOMS IN NEW YORK AND CHICAGO

133W.WASHINGTON ST. CHICAGO

Ammunum A

ITROLITE COMPANY PARKERSBURG, W.VA. BRANCHES

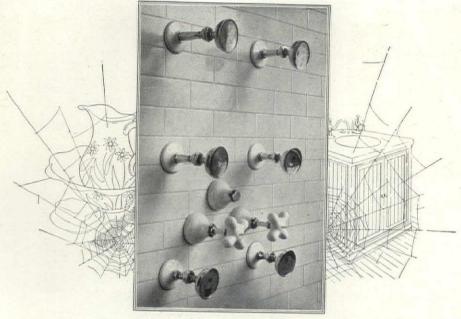
ATLANTA
BALTIMORE
BOSTON
BROOKLYN
BUFFALO
CINCINNATI

10 Kin

CLEVELAND
COLUMBUS
DALLAS
DENVER
DETROIT
KANSAS CITY OMAHA

合い語となべ

PHILADELPHIA SPRINGFIELD MASS HONOLULU MONTREAL JOHANNESBURG OSAKA LONDON SAN JUAN PROVIDENCE WASHINGTON MANILA SHANGHAI TORONTO SEATTLE HAVANA MEXICO CITY



This CRODON-Plated American Pin Company Shower will never tarnish or discolor.

### NO MORE ANTIQUES in the Bathroom

70U select fixtures of the very best quality Y when you plan your clients' bathrooms. Yet, in a short time, when the brass begins to show through, they lose their beauty and look old.

Now you can obtain fixtures that never look

old by specifying Cropon finish. For Crodon will last as long as the very building itself.

Thus it is possible for you to do away with practically all replacement and most maintenance costs for your clients. A mere wiping with a cloth removes grease or other foreign matter from a Crodon surface leaving the original lustre unaffected.

The unusual beauty of Cropon permits of no confusion with ordinary finishes. It is available either in a brilliant mirrorlike surface or a

soft silvery satin.

Specify CRODON for

PLUMBING FIXTURES BATHROOM ACCESSORIES FLUSH VALVES Builders' Hardware DOOR PLATES DOOR KNOBS Door HINGES ELECTRIC LIGHTING FIXTURES ELECTRIC FANS SWITCH PLATES ELEVATOR HARDWARE HAND RAILINGS SPRINKLER HYDRANTS CUSPIDORS

MISCELLANEOUS EXPOSED

METAL SURFACES

Any Cropon-plated fixture is guaranteed to retain its high lustre and color indefinitely from the time of installation without the necessity of using abrasives or any polishing compounds.

Moreover, a Crodon plate will never tarnish

or peel, indefinitely resisting steam and the majority of acids.

Certain manufacturers of quality products carry Crodonplated fixtures in stock. Others supply them when specified by having the Cropon-plating done in one of our plants.

Upon request our Architects' Service Department will give any desired details or estimate the probable cost of Cropon for any building project. Write the Chemical Treatment Co.,

Inc., 26 Broadway, New York City.

The Chrome Applied Only to



Alloy Plate Quality Products



## Giving Pools the Beckoning Appeal of Pure Swimming Water

WHEN you know the water in a pool is pure and refreshing—free from harmful bacteria and free from biting chemicals—there's a beckoning appeal that says, "Comeon, dive in." And if you heed that appeal, you'll come up with a pleasant and refreshed feeling.

That is the kind of water you'll have in the pools you design if the recirculating systems

are equipped with R-U-V Sterilizers. Every drop of water that goes through them is perfectly sterilized. Quartz mercury vapor lamps produce powerful ultra violet rays which penetrate each drop of water and instantly kill every disease-producing germ. But these rays cannot in any way affect the taste, composition or feel of the water.

In addition, these rays set up a residual germicidal action that

The R. U. V. Co., Inc. 383 Madison Ave. New York City keeps the water pure after it is in the pool. Tests taken in R-U-V pools show that the water with which the bathers come into actual contact is usually purer than that specified by the U. S. Treasury Department Standards as pure drinking water.

And the R-U-V method of treatment is so simple that it becomes practically automatic.

The sterilizing operation is independent of human control and judgment. The building janitor or practically anyone can take care of the operation and maintenance with the assurance of perfect sterilization.

If you are interested in providing pure, refreshing water for the pools you design or operate—water that contains positively no biting chemicals—water that feels just as nature intended it to feel—write for our pool booklet F-22.

R.U.V Sterilizer
Type M.A.2

James B. Clow & Sons 201-299 No. Talman Ave. Chicago, Ill.



Ultra Violet Ray Water Sterilization

### Competitions in Design

1—Competition for street traffic signal tower and traffic signal standard designs, and street lighting standard designs, including street name signs.

2—Competition for filling station designs.

for

### BISCAYNE BOULEVARD

Miami, Florida

Conducted by BISCAYNE BOULEVARD ASSOCIATION

BENNETT, PARSONS and FROST, Professional Advisers

These competitions are approved by the American Institute of Architects.

Note: The electrical and mechanical equipment of the above structures is not a part of these competitions.

COMPETITIONS CLOSE 6 P.M. OCTOBER 1, 1926



Miami Harbor and Skyline of the lower portion of Biscayne Boulevard, taken from the new Causeway (Venetian Way) to Miami Beach and showing the Thirteenth Street Causeway in the foreground.

These competitions are open to all who desire to offer designs of merit for the above named structures. The purpose of these competitions is, [1] to obtain designs for traffic signal towers and standards and street lighting standards to be erected on Biscayne Boulevard, Miami, Florida. [2] to develop ideas for more pleasing filling station designs and [3] to stimulate general interest in the designing of better structures pertaining to public street improvement.

Biscayne Boulevard is a 100 foot street which extends from the center of Miami northward to Northeast 55th Street [three and one-half miles]. It runs along Biscayne Bay for one mile, and about one block from the Bay for the rest of its course through a high class residential section of Miami. The south end [formerly Bay Shore Drive] is an old street recently widened and improved. The north two and one-half miles is a new street opened by cutting through fourteen improved city blocks, widening a narrow street [formerly Northeast Third Avenue] through nineteen improved blocks, and extending the street thus created through the recently divided estate of Charles Deering, into Bay Shore, a suburb of fine homes. Biscayne Boulevard here becomes the Federal Highway, which combined with the Dixie Highway, extends 360 miles to Jacksonville, Florida, and beyond to the Northern States.

Buildings are now being demolished along the new portion of Biscayne Boulevard and this section will be opened about December 1, 1925. Already dwellings are giving way to buildings for showrooms, theatres, offices, restaurants and first class shops.

Being a main artery of through traffic, a system of traffic signals will be required, lighting will be made a feature, and the demand for filling stations along the northern section of the Boulevard must be taken into consideration.

The Biscayne Boulevard Association is anxious that such structures shall be well designed so as to add to the beauty of the Boulevard. The Association, representing more than 80 per cent of the property, is desirous to control in a measure the architecture and the uses of the street. With the cooperation of the City of Miami and the City Planning Board, Royal Palms will be planted the entire length of Biscayne Boulevard.

Any competitor may submit designs for one or both competitions. The awards will be made separately.

The Biscayne Boulevard Association agrees to award to the winners within 5 days after the judgment of the jury, \$4,650.00 in prizes as itemized below.

> No. 2 . \$750.00 . 400.00 . 250.00 . 150.00

Compe	etition No. 1	r Competition
a + 11	\$1,000.00 LIST	1st. Prize
3rd. " .	400.00 F	3rd. "
4th. ". 6 Mentions	200.00 PRIZES	4th. " 6 Mentions, each.

Program of the Competitions may be obtained by addressing Harry T. Frost, in care of:

—Biscayne Boulevard Association, Columbus Hotel, Biscayne Boulevard, Miami, Florida.

or—American Architect, 239 West 39th Street, New York

or—Bennett, Parsons and Frost, 80 East Jackson Boulevard, Chicago.

# Recent Glass Lined Laundry Chute Orders

-include the following:

Queen of Angels Hospital Los Angeles

-1 chute

Flower Hospital Toledo, Ohio

-1 chute

St. Vincent's Hospital Los Angeles

-1 chute

Northwestern Hospital Minneapolis

-2 chutes

The drawing at the right is taken from our booklet giving complete details. Referring to diagram:

- 1. 11/2" pipe bushing for connection to water service pipe. This is for flushing the chute and keeping it sanitary.
- 3" coupling for ventilator pipe.
- German silver door fitted with plate or polished wire glass—this is the only part of chute which shows on each floor.
- 4. Special "Pfaudlerite" Gasket for each joint.
- 5. 2" standard pipe outlet threaded for drain connection carrying off water after flushing.



Send for complete catalog.

THE PFAUDLER COMPANY

Laundry Chute Division

ROCHESTER,

NEW YORK

DEAIIDIFR.



### GRILLES OF DISTINCTION

Architects are offered a wide selection of distinctive designs in stock patterns of Wickwire Spencer Perforated Metal Grilles; and special designs are accurately produced on order.

These come in all the usual metals and finishes, and also in Wissco Bronze which combines beauty and strength with moderate cost.

WICKWIRE SPENCER STEEL CO.
41 East Forty-second Street, New York

### WICKWIRE SPENCER PRODUCTS



### Acoustics of Buildings

Including

Acoustics of Auditoriums and Soundproofing of Rooms

F. R. WATSON
Professor of Experimental Physics, University of Illinois

This book covers the entire subject of Acoustics of Buildings. It describes briefly the action of sound in buildings, and, in accordance with the present knowledge of the subject, gives detailed illustrations for guidance in the acoustic design of new buildings and in the correction of acoustic defects. In this volume, mathematical formulæ and theory have been minimized, but the results of experimental tests are set forth in considerable detail. Formulæ which are needed for calculating acoustic effects are illustrated by numerical examples and curves. The publication of this book was made necessary because of the repeated requests made by architects and builders for help in the correction of acoustic difficulties found in many buildings. Information is also needed about the construction necessary to avoid these defects in new buildings. As the scientific publications on the subject deal with special topics in more or less general terms, an extensive study is required before practical applications can be made with any degree of confidence. The existing knowledge of the acoustics of buildings is incomplete in many respects, with the result that a number of misleading ideas have grown up to explain the phenomena. The book is divided into two main divisions, 'Acoustics of Auditoriums' and 'Soundproofing of Rooms.'

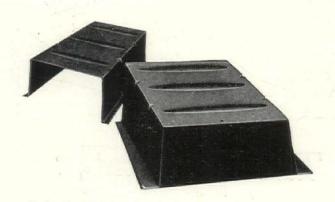
152 pages; 6 by 9 inches; 72 figures. Cloth, \$3 Postpaid

ROGERS & MANSON COMPANY 383 Madison Avenue, New York

# MEYER Again Save Concrete, Steel STEELFORMS Formwork, Time and Labor



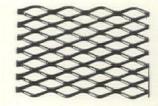
W. S. Crosby & J.G. Mearthur Seldon-Breck Const. Co. Contractors



150,000 Sq. Ft. of Meyer Removable Steelforms were used in the new Medical Arts Building at Omaha. This type of construction is a standard system of concrete joist construction in present day use by prominent architects and contractors practically everywhere. Meyer Steel forms are furnished 20 inches wide by 1, 2 and 3 feet long, intermediate forms, and straight, single tapered and double tapered end forms.

Meyer Steelforms are handled on a rental basis only. Call our nearest office for specific data.

### Other CECO Reinforcing and Fireproofing Materials Used In This Building



"Better Plastering" on 20,000 Sq. Yds. of Ceco 3.4 lb. "Quality" metal lath hold plaster tightly and permanently to the ceilings of this new office building. This style of Ceco Lath is a flat, diamond meshed expanded metal lath.

The diamonds are \(^3\)\sections in. wide and afford only sufficient mortar to pass through the mesh to provide a perfect key.

Ceconomy ¼-in. Rib Lath is another Ceco Metal Lath rapidly becoming popular. Write for literature about this new product that accurate tests have proved to require 20% less plaster.

200 Tons of Ceco Reinforcing Bars were also used in this building. They are rolled only from new billet steel and are furnished in deformed rounds and squares in standard sizes. The deformations, or lugs, are at

right angles to the main axis of the bar and thus provide the most positive kind of mechanical bond to aid in the adhesion of the concrete to the steel. Ceco reinforcing bars are inspected and approved by the Robert W. Hunt & Company, and are kept in stock at our warehouses listed below.

### Send for This New Edition -



of our "Handbook of Fireproof Construction". It is more complete than any previously published. It contains tables, charts, diagrams, photographs, and detailed information of interest to architects, engineers and contractors. Send for your copy today. Address our Omaha Office—Dept. 35



### CONCRETE ENGINEERING CO.

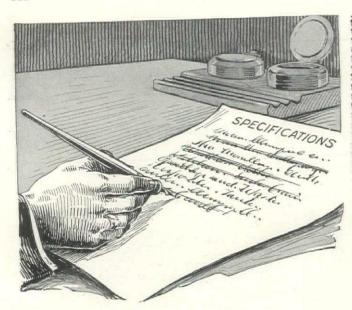
OMAHA DETROIT

CHICAGO

OFFICES AND WAREHOUSES:

KANSAS CITY
MINNEAPOLIS

DALLAS MILWAUKEE DES MOINES



# The Kernerator invariably survives the "cost paring"

YOU'VE gone through the "cost paring" process time and again. Your client demands certain things. You add others which are indispensable. The resulting total cost is too high. Then comes the "paring" — eliminating this and that to reduce costs.

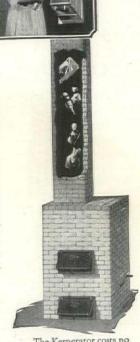
But the Kernerator, once included in the specifications, is rarely, if ever, eliminated. No housewife, who has once glimpsed freedom from garbage drudgery, would think of continuing with the antiquated, tiresome, germ-breeding garbage pail method.

The architect will not consider eliminating the Kernerator because he knows it must be built in—it can rarely be installed after the building is completed.

That's why upwards of 2500 of America's leading architects habitually specify the Kernerator—the original flue-fed [incinerator.

See Sweet's (1925), pages 2800-01. For additional information, phone your local Kernerator representative or write—

Kerner Incinerator Co. 715 East Water Street Milwaukee Wisconsin

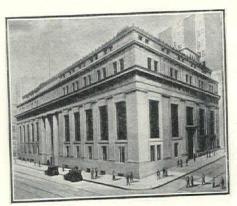


The Kernerator costs no more than a good radioand the radio can be added any time while a Kernerator must be built in.

## TERRERATOR THE CHIMNEY-FED INCIDERATOR

Garbage and Waste Disposal without Leaving the Kitchen

### AGreat Banking Building Demands the Best



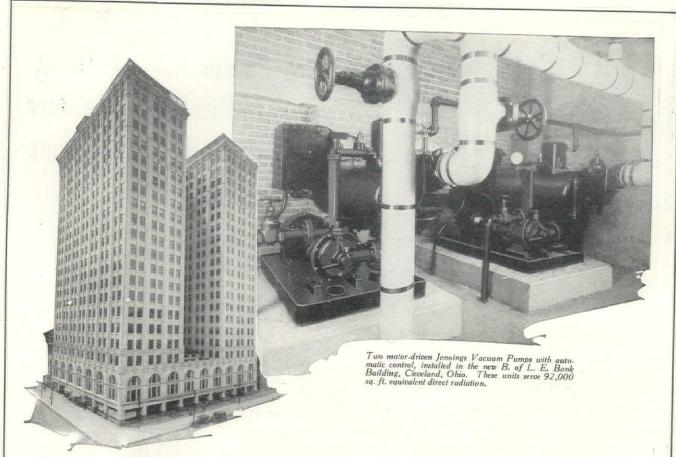
MELLON NATIONAL BANK, PITTSBURGH
Architects: Trowbridge & Livingston
E. P. Mellon, Associated

In the foremost rank among modern bank buildings is that of the Mellon National Bank, Pittsburgh. For a structure of such importance it is necessary that every detail of equipment be of the best, the most economical and the most efficient that can be had,—hence the use of the central vacuum cleaning system manufactured by The Spencer Turbine Company.

Among other recent installations there are many in important buildings of different types,—banks, hotels, office buildings, schools, theaters, clubs and dormitories, at colleges and universities, hospitals and other institutions, all those being structures in which only the strongest and most durable equipment is equal to the requirements.

SPENCER TURBINE CO. HARTFORD, CONN.

SPENCER CENTRAL CLEANING SYSTEMS



This is the new Bank Building of the Britherhood of Locomotive Engineers, Cleveland, Ohio. Mr. R. G. Nairn, Engineer of Construction, Cleveland, Ohio.

# Jennings—a logical choice for this up-to-date plant

Starting in 1920 with modest quarters, the labor bank of the Brotherhood of Locomotive Engineers, Cleveland, grew so rapidly that by 1925 larger facilities became necessary. As a result, the new 19-floor bank and office building, shown above, was planned and built.

This building is up-to-date in every respect. Only the most improved equipment is installed for providing light, heat and power.

For removing the condensate and air from the exhaust steam heating system, Jennings Pumps were a logical choice. For in the many years they have been in use, Jennings Pumps have proved again and again that they can always

be depended on for efficient trouble-free performance—the kind of performance that is indispensable in getting the best results in cooperation with other high grade equipment in the plant.

For complete information on Jennings Pumps and the uses for which they are recommended, write for our illustrated bulletins.

Nash Engineering Company

So. Norwalk



Connecticut

Branch Sales Offices in: Atlanta, Birmingham, Boston, Buffalo, Chattanooga, Chicago, Cleveland, Dallas, Denver, Detroit, Indianapolis, Kansas City, Memphis, Miami, Minneapolis, New Orleans, New York, Omaha, Philadelphia, Pittsburgh, Portland, Richmond, St. Louis, Salt Lake City, San Francisco, Seattle, Tampa, Washington.

In Canada: Montreal, Toronto and Vancouver.

Jennings Pumps
RETURN LINE AND AIR LINE VACUUM PUMPS GONDENSATION AND CIRCULATING PUMPS

### YOUNG

CENTRIFUGAL VACUUM AND BOILER FEED

Supplied in Standard Units of Seven Capacities

### PUMPS

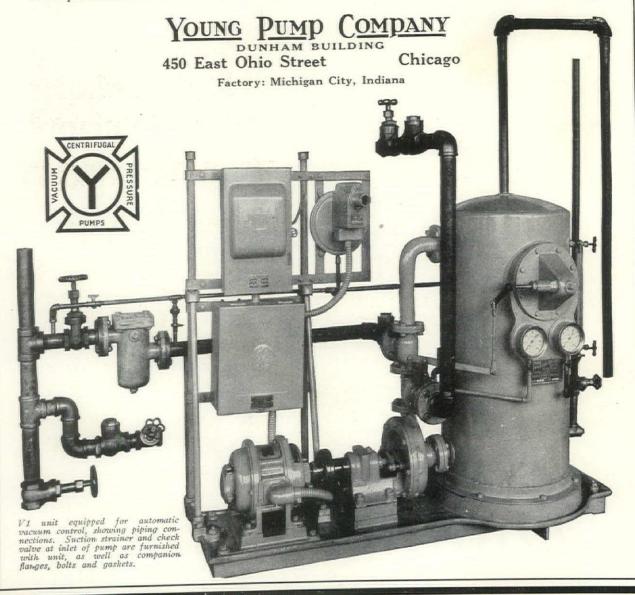
### Young Pumps have a Standard Discharge Pressure of 20 Pounds at the Pump

I N Designing Young Centrifugal Vacuum and Boiler Feed Pumps to maintain a standard discharge pressure of 20 pounds at the pump, we have made it possible to return water to the boiler at all times.

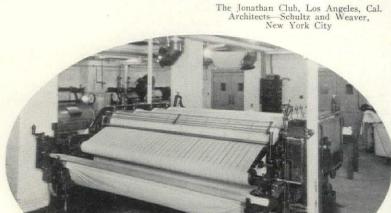
Pumps with but half of this discharge capacity may fail to return water to the boiler when the boiler pressure reaches 8 or 9 pounds. Boiler pressures under the A. S. M. E. Code may reach fifteen pounds, the maximum permitted under the code, showing the

necessity for a pump with a standard pressure of at least 20 pounds at the pump.

There are seven capacities in which the Young Pumps are supplied, ranging from 5,000 to 100,000 square feet of direct radiation, and all of these are built to discharge against this standard 20 pound pressure. Special pumps with a discharge pressure of 35 pounds also may be furnished with same unit numbers, if desired. Both standard and special units are furnished for continuous or automatic operation.



### No. 23 of a series of advertisements featuring prominent laundry installations





The American Flat Work Ironer, on which all flat work for the Jonathan Club is quickly and neatly ironed.

The American Monel Metal Cascade Washers and Underdriven Extractor in the Jonathan Club laundry. Note the small amount of floor space occupied by this complete washroom.

# Planned from the start

# -a complete "American" Laundry for the Jonathan Club, Los Angeles

AT the very outset, in discussing plans for their handsome new building, officials of the Jonathan Club, Los Angeles, decided upon a laundry department—for they knew that a laundry within the building, itself, is an absolute necessity where high standards of club service are to be maintained.

Naturally, "American" equipment was selected for this laundry since such equipment is now considered standard in many of the finest hotel, club and commercial laundries of the country.

A glance at the photographs shows the compactness of the installation, designed with the cooperation of "American" engineers. And the efficiency of the equipment is best evidenced by the immaculate napery, fresh, clean bedroom linens—as well as the ease and speed with which soiled articles are cleaned and returned to service.

### At your service—a corps of laundry specialists

The American Laundry Machinery Company maintains a corps of engineers who have gained wide experience in planning and equipping most of this country's foremost hotel, commercial and institutional laundries. If you have any questions pertaining to modern laundry practice, you will find consultation with these specialists advantageous. This service is gladly offered to you, without obligating you in any way.

### The American Laundry Machinery Company

Norwood Station, Cincinnati, Ohio

THE CANADIAN LAUNDRY MACHINERY CO., LTD. 47-93 Sterling Road, Toronto 3, Ont., Canada

Agents: BRITISH-AMERICAN LAUNDRY MACHINERY CO., LTD. Underhill St., Camden Town, London, N.W.1, England

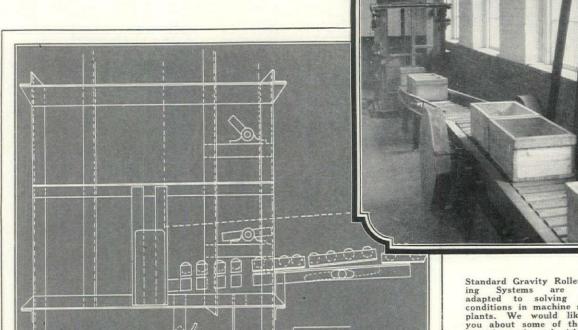
### STANDARD CONVEYORS HELP SET YOUR DINNER TABLE

Not individually in your homes of course but by enabling the manufacturer of your table ware to lower his costs and increase his output.

Some years ago, the mounting production costs in the cutlery plant of R. Wallace & Sons, of Wallingford, Connecticut, necessitated radical changes in their handling methods. A Standard Conveying System was eventually chosen as the logical means for assisting the production end of the business to keep up with the constantly increasing sales volume—and, as events proved, with results that were more than satisfying.

"Standard" Conveying Systems can be designed to carry package goods, boxes, cases, cartons, etc., in any directionhorizontally, vertically or inclined. You'll find much of interest in an analysis of the job shown here. Sent free to architects for the asking.

The illustration below shows a portion of the system—a horizontal, power, slat, or apron conveyor delivering house trays containing the cutlery parts in various stages of manufacture to a vertical lift elevator—the operation being entirely automatic throughoutthe ascending carriages on the vertical lift machine receiving the trays from the horizontal conveyor without manual transfer or help of any kind being necessary. On the upper floors delivery to similar horizontal gravity roller or power conveyor is madealso automatically throughout.



Standard Gravity Roller Convey-ing Systems are especially adapted to solving conveying conditions in machine shops and plants. We would like to tell you about some of the convey-ing jobs performed with Standard Roller Conveying Systems.

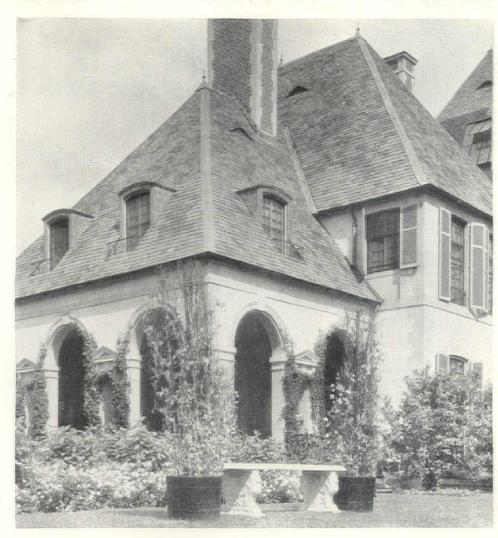
# COMPAN

New York Office, 405 Lexington Avenue Chicago Office, 549 West Washington Street Philadelphia Office, 3110 Market Street Cleveland Office, 1108 Hippodrorue Building Indianapolis Office, 404 Lombard Building

NORTH ST. PAUL, MINN.

Cable Address: Gravity

Kansas City Office, 419 Manufacturers' Ex. Bldg. Milwaukee Office, 209 Grand Avenue Los Angeles Office, 502 Grosse Building Seattle Office, 1105 Second Avenue Charlotte Office, P. O. Box No. 131



A Residence in Newport, Rhode Island. Architect, John Russell Pope. Pyrobar Roof Tile used.

# . . . and it simplifies Roof Layout

Half the grief of these tough jobs of roof layout disappears, when you turn to Pyrobar Short Span Roof Tile. These  $12'' \times 30''$  bars of white gypsum rock work right in with your standard steel spacing. And where the angles hit, remember a Pyrobar Tile is easily cut to fit.

So if you've passed up the tremendous advantages of this great roof deck construction, for fear of framing difficulties—perish the thought!

These steel-mat-reinforced tile are light, too. They save steel. And their insulating factor is positively amazing.

Of course you know they're FIREPROOF!

May we mail you the handy-size data book for your useful files? Your copy is waiting to be addressed.

### UNITED STATES GYPSUM COMPANY

General Offices

Dept R, 205 West Monroe Street, Chicago, Illinois

# PYROBAR ROOF TILE

Made by the United States Gypsum Co.

U,S

### MAIL THIS NOW!

United States Gypsum Company
Dept. R, 205 W. Monroe Street, Chicago. Ili.
Please forward your handy-size data book on Pyroba. Roof
Tile.

Name	
------	--

Address



# should be in every architect's files

# A 48-page treatise on pumping equipment for buildings

THIS book was compiled primarily with the idea of placing before those responsible for specifying pumping equipment, a boiled-down outline of the clearly defined classes of pumping service and the types of equipment best adapted to these classes of service.

Nothing is included in this book that should *not* be considered by the architect. Essential and practical information is easily ascertained without going through the usual large amount of theoretical and extraneous matter.

Such a book is the natural outcome of experience gained by Fairbanks-Morse in solving the pumping problems of practically every basic division of industry.

Use the coupon as a memorandum to your secretary or mail it to us directly and a copy will be forwarded to you.

FAIRBANKS, MORSE & CO., Chicago Power pumping and weighing for buildings

FAIRBANKS-MORSE PUMPS · MOTORS · DIESEL ENGINES

### Questions like these authoritatively answered

How does layout and pumping equipment influence maintenance costs?

How are general water service systems for large buildings classified—and when should a given system be used?

How does temperature of water affect the suction lift of pumps?

What are the standard water supply requirements for different classes of buildings?

How do centrifugal and reciprocating pumps compare for use in boiler-feed service?

What are the water requirements for air washing and how are they best handled?

How are the capacity requirements for ice water in large buildings estimated?

What is the most satisfactory condensation pump for steam heating systems and where should it be located?

What type of equipment for sump pumping reduces maintenance to a minimum? Chicago

Address of book.

## WHERE ONLY THE BEST IS USED THE PUMPS ARE "CHICAGO'S"

I T is not surprising to find "Chicago" pumps installed in such buildings as the Tribune Tower and the London Guarantee Building of Chicago, the Aeolian Building in New York, the Nels Esperson Building in Houston, and other buildings equally prominent all over the country.

For today, architects and engineers consider quality and durability of general construction just as important as the detail of design. "Chicago" pumps are recognized as far superior where endurance, strength and satisfactory service are demanded, and there can be no other logical choice of pump.

The fact that "Chicago" pumps are specified and used in so many of the largest and most splendid structures where assurance of quality and durability is demanded, by leading architects and construction engineers, is conclusive evidence of "Chicago" pump superiority.

Let us send you our Descriptive Catalog

Circulating

Sewage

House

Condensation Vacuum

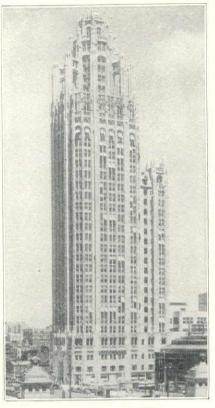
Bilge Fire I

CHICAGO PUMP COMPANY

Manufacturers of Quality Centrifugal Pumps

2316 Wolfram Street

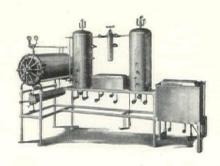
Chicago, Illinois



TRIBUNE TOWER
HOWELLS & HOOD
Associated Architects
E. BAGGOT & COMPANY
Plumbing Contractor

### Visualize a STERILIZING Room Free From Hissing Steam







More than 100 Hospitals have been equipped completely with SUPER-KNY PRESSURE STERILIZING APPARATUS and RECESSED CABINETS during the past year. THERE IS A REASON.

More than thirty-five years of satisfactory service has earned for our apparatus a reputation for unexcelled supremacy.

The Super-Kny Automatic Controls for the Electric Current, High Pressure Steam lines and Gas, make possible the Sterilizing Room free from hissing steam and vapor.

Our EJECTORS eliminate the necessity for a vapor vent to roof.

Catalogues and Roughing-in cheerfully furnished gratis. A. I. A. No. 35-K.



### The KNY-SCHEERER Corp.

OF AMERICA

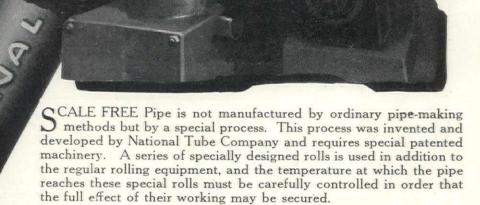
America's largest Manufacturer of Hospital Equipment

119-125 Seventh Avenue (Dept. 41)

New York, N. Y

# It Requires Special Rolling to Make Pipe SCALE FREE

The pipe passes from the transfer table to these special rolls where it is reduced slightly in diameter and increased in length. By thus rolling the pipe, the hardened welding-scale is loosened, drops from the pipe walls and is later removed by being either washed or blown out.



The regular sizing rolls partially loosen some of the scale which forms on the skelp in the welding furnace, but its actual removal takes place in the special scale free rolls, to which the pipe is next delivered by means of a transfer or cooling table. While the pipe crosses the table the scale cools somewhat and becomes brittle. In the specially designed scale free rolls, the pipe is reduced in diameter and increased in length. This working of the metal in opposite directions removes the brittle scale, so that it falls from the pipe walls and later is blown out with compressed air or washed out with water.

Therefore—it is free from scale and here are the advantages: Clean, smooth surfaces, both inside and out—Minimized friction losses—Full delivery capacity—Good base for galvanized coatings—No scale to damage valves or clog small openings—Minimized corrosive tendencies, particularly pitting—and longer life in service. Ask for Bulletin No. 7, which describes the process applied to "National" Butt-weld Pipe, sizes ½ to 3-inch.

### NATIONAL TUBE COMPANY

Frick Building, Pittsburgh, Pa.



New York

The Equitable Building, Starrett & Van Vleck, Architects. E. E. Ashley, Jr., Electrical Engineer

Sherarduct installation in "The Enquirer" building. Lockwood, Green & Co., Engineers.

From New York & Tokio.

SHERARDUCT is known and used in practically every civilized country in the world. Defying climatic conditions, the Ace of Conduits guards the wiring systems of important buildings in Tokio, Shanghai or Caracas, just as effectively as it does in New York City. The heavy coating of zinc, alloyed under intense heat, actually becomes a part of the steel pipe, protecting both inside and outside surfaces against rust, corrosion and the destructive effect of acids. A coating of enamel adds further protection.

Sherarduct is a smooth, permanent raceway for wires that will bend freely and can be cut and threaded easier than any other conduit. Threads also are clean, sharp and true.

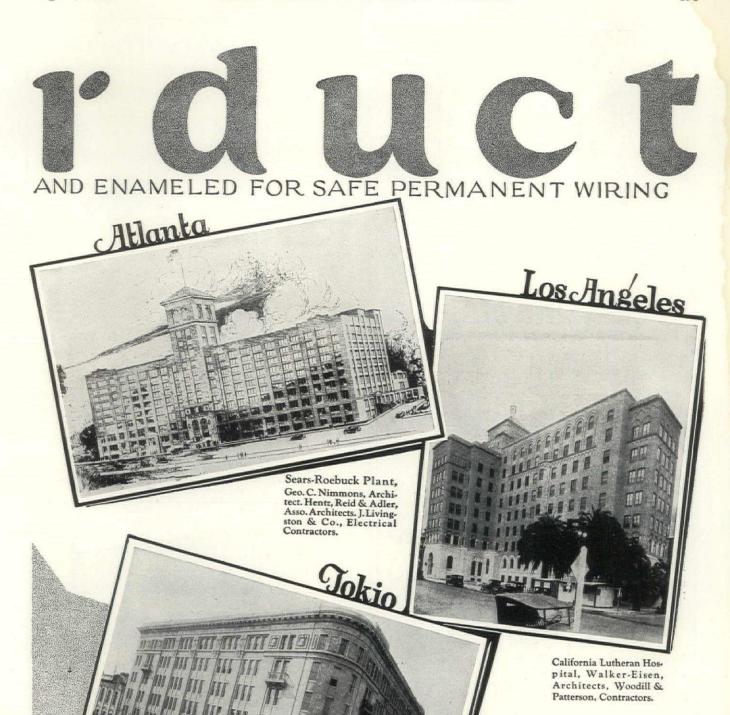
Send for literature and test samples.

NATIONAL PRODUCTS

nationalMetal

The National Wiring System > FOR SAFETY And PERMANENCE

The Yuraku Building



Molding Company
1101 Fulton Building PITTS BURGH ~ PA.



### HOTEL PERE MARQUETTE

Under construction at Peoria, Ill.

Owners

The Pere Marquette Hotel Building Corp.

Associate Architects Horace Trumbauer

Hewitt & Emerson

Plumbing Contractor, Thomas J. Cody General Contractors, V. Jobst & Sons

Being equipped throughout with the



### Flush Valve and Duojet Closet

Non-Clogging-Water Saving



THE design of the Watrous Duojet Closet prevents clogging and overflowing by eliminating the narrow passage needed by many types of closet to maintain syphonic action. It is also very economical with water.

The Watrous Flush Valve delivers the exact quantity of water required for a thorough flush by the type of bowl with

which it is used. Therefore, when used in combination with the water-saving Duojet Closet, it assures a substantial saving of water at every flush-an important annual economy.

#### PLUMBING DIVISION

Watrous Flush Valves—Duojet Closets—Self-Closing Basin Cocks—Combination Lavatory Fixtures—Pop-Up Wastes—Liquid Soap Fixtures—etc.

#### THE IMPERIAL BRASS MFG. CO.

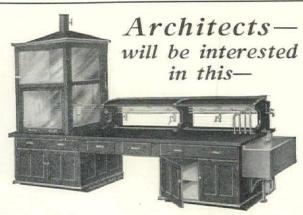
1238 West Harrison Street

Chicago

#### BRANCH SALES OFFICES

BRANCH SALES OFFICES

Room 514, 51 East 42nd Street, New York, N. Y.
H. D. Tuck, 404 Marquette Bldg., Detroit, Mich.
W. E. Blair, Jr., c/o Coronado Hotel, St. Louis, Mo.
R. J. Shank, 724 Grand Ave., Des Moines, Ia.
Continental Sales Co., 924 Metropolitan Life Bldg.,
Minneapolis, Minn.
Charles S. Anderson, 6614 Minne Lusa Ave., Omaha, Neb.
Wm. P. Horn Co., 237 Rialto Bldg., San Francisco, Cal.
L. C. Coombs, 1234 S. Broadway, Los Angeles, Cal.
Wm. P. Horn Co., L. C. Smith Bldg., Seattle, Wash.



We have the largest Library of Laboratory Plans in the world-records of a generation of Laboratory construction.

Whatever the building-whether a School, Hospital or Industrial Plant-Kewaunee's "Library" will prove helpful.

You are welcome to make use of us as one of the departments of your office. Our big Kewaunee Book-showing over 500 standardized designsfree to Architects.

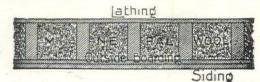


C. G. CAMPBELL, Treas. and Gen. Mgr.

New York Office 70 Fifth Avenue

141 Lincoln Street Kewaunee, Wis.

Offices in Principal Cities



Section of Outside Wall of House, Showing Wool Between Studding

### Mineral Wool for Building

Mineral Wool has superseded all other materials used for similar building purposes because it does "a great work at little expense." A house lined with Mineral Wool has an indestructible, fire-proof and vermin-proof guard; it protects the entire household. In the winter time it keeps the cold air out, facilitating proper heating and economy in fuel. In the summer it keeps the heat out.

This material, being of fibrous, inelastic composition, acts as a deadener and muffles all sound. It is considered the best insulator material on the market, making it a perfect refrigerating machine.

Mineral Wool makes life-long friends of all its users. If you are skeptical as to its power, let us demonstrate. We can prove all claims. Write us today.

#### U. S. MINERAL WOOL CO.

280 Madison Avenue, New York



Section of Sound-Proof and Fire-Proof Partition



### Trane Undivided Responsibility Heating in 50-year-old Belmont County, Ohio, Infirmary

This installation has the equivalent of 15,000 sq. ft. of radiation, taken care of by three cast iron boilers having a total of 27,000 sq. ft. The piping is arranged so that by opening or closing a few valves the system can be operated as a vacuum system using the Trane Return Line Duplex pumps, or it can be operated as a vapor system using Trane Direct Return Traps. The pumps have a rated capacity of 12,000 sq. ft. each. 175 Trane Bellows Traps, and 155 Trane Valves are used. The three buildings in this group are connected with the boilerhouse by tunnels, the farthest radiator being 500 ft. by pipe line from the boilers.

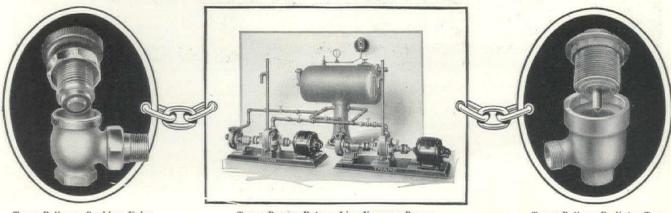
Mr. Fitton, the contractor, received the following letter from the commissioners of Belmont Co.:

"We desire to advise you that the Trane System installed in the Belmont County Home is certainly 100% perfect and is doing everything that you and the Heating Engineer claimed for it. We have no hesitation in recommending either the system or you as the heating contractor who installed it to any who are interested in getting the best."

Mr. Fitton also received a letter from Supt. Moon of the Infirmary, telling of the satisfactory, economical, and efficient service by the system, and closing by saying "I can recommend this system as the best for we have three warm buildings and no worry."

This freedom from worry is one of the nicest things about Trane Undivided Responsibility Heating. Let. us tell you more.

The Trane Company, 220 Cameron Ave., La Crosse, Wis., manufacturers of vapor and vacuum heating specialties and pumps. Branches and sales connections at New York, Chicago, Boston, Clacinnati, Newark, Philadelphia, Buffalo, Cleveland, Detroit, Seattle, Los Angeles, Albany, Minneapolus, Salt Lake City, Greensboro, N. C., Zanesville, Ohio, Tampa, Fla., Baidimore, Md., Des Moines, Ia., New Haven, Conn., Sheboygan, Wis., Kansas City, Mo. In England: 22-23 Clerkenwell Close, London, E. C. I. In Canada: The Trane Co., 21-23 River St., Toronto, 2; Thomas Robertson & Co., 134 Craig St. West, Montreal; F. S. Murdoch, 310 Breadalbane, Winnipeg; A. B. Madden, 48 Sparks St., Ottawa. In China: C. J. Doughty & Co., 7 Jinkee Road, Shanghai.



Trane Bellows-Packless Valve

Trane Duplex Return Line Vacuum Pump

Trane Bellows Radiator Trap

Nationally Dis-tributed by Lead-ing Wholesalers and Boiler and Radia-tor Manufacturers.



Single coil heaters from 30to 120gal. capacity. Double coil heaters from 160 to 400 gal. Triple coil heaters, 600 to 800 gal.

EXCELSO COSTS LITTLE TO OPERATE

Never Burns Out

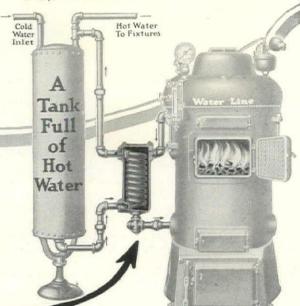
EARLY 350,000 Excelso Indirect Heaters supply hot water in homes, office buildings, apartments, hotels and buildings of all types and sizes.

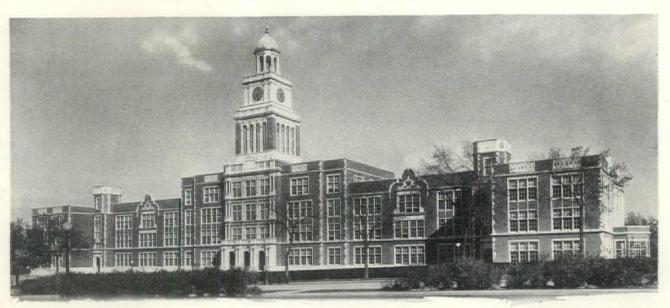
Easily connected to heating plant and when once installed gives lasting satisfaction.

Write for installation literature

Excelso Specialty Works, Inc. Buffalo, N.Y 69 Clyde Ave.

District Representatives: 210 E. 45th Street New York, N.Y. 5939 Haverford Ave., Philadelphia, Pa. 32 Olive r. Boston, Mass.





East High School of Denver

George H. Williamson, Architect

Combining all the properties necessary and desirable for acid drain pipe, Duriron alone may be specified with the assurance that it will last as long as the structure, wholly eliminating repairs and replacements under any conditions.

The paid-up insurance that Duriron drain pipe provides caused its specification from the laboratories of Denver's East High School, and over a thousand others during the past five years. It is guaranteed, and doesn't need the guarantee.

Duriron is produced only by IN COMPANY

# Our Guarantee

The Trenton Potteries Company makes but one grade of ware—the best that we can produce—and sells 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 this company and is your guarantee that you have received what you paid for.



THE TRENTON POTTERIES COMPANY

Trenton, New Jersey, U.S.A.

NEW YORK

ROSTON

PHILADELPHIA

SAN FRANCISCO

## There's No End To the Economy of



Evernu Hard Rubber Seats are everlasting.

The repairs and replacements you don't have will represent a considerable saving. Year after year that saving will accumulate. It will go on accumulating long after the initial cost has been returned. It will go on, in fact, until the building has seen its day and is razed. Even then the seats could probably be used in another building. And this will surprise you: superior as they are, Evernu Seats cost no more than other seats.

Condensed specifications will be found in Sweet's. Complete specifications are given in the new Evernu Catalog, which should be in your file.

### THE NEVER SPLIT SEAT COMPANY Dept. 128, Evansville, Indiana, U.S. A.

Founded 1905

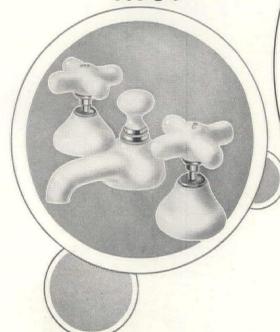
The Largest Manufacturers of Toilet Seats in the World

#### Representatives in the U.S.



# VITAL SPOTS

-indeed that's what they are!



The story of Mueller Faucets and plumbing brass fittings for the Vital Spots of plumbing goes into the homes of 3,800,000 families every two weeks. Full-page color advertisements in The Saturday Evening Post and Liberty Magazine feature Mueller brass goods and emphasize their relation to more satisfactory plumbing systems. Watch for these advertisements. They are making it easier for you to specify better plumbing.



Indeed, that's what they are! Faucets are the *Vital Spots* of the plumbing. Every day they are subject to constant use and wear. If they give good service, they can add immensely to comfort, convenience and sanitation. But if they don't . . . What a source of annoyance and expense sputtering, leaking, ill-behaved faucets become to the owner!

People today recognize faucets as *Vital Spots* that deserve careful consideration at the time of installation. More and more, people who like to live in a modern way are acquainting themselves with the refinements in appearance and betterments in operation that distinguish *better* faucets. They are learning that the best is none too good at the *Vital Spots* of plumbing—and that to have Mueller Faucets is to have the assurance that faucet troubles are settled once and for all.

MUELLER CO. (Established 1857) Factories: Decatur, Illinois; Port Huron, Michigan Branches: New York, San Francisco, Los Angeles Canadian Factory: MUELLER, Limited, Sarnia

# MUELLER

faucets without a fault

# Delmonico and Jenkins

Time has closed the doors of Delmonico's. The celebrated old restaurant exists only in the pleasant memories of hundreds of New Yorkers.

Today on the familiar site at 5th Ave. and 44th St., a 33 story modern office building is being erected in accordance with the high standards naturally to be expected of a building called by the name of Delmonico.

Jenkins Valves are part of the owners' promise that "superior service will be maintained with the latest mechanical equipment." Valves marked with the Jenkins "Diamond" will serve the Delmonico Building throughout the plumbing service, and in heating and fire protection as well.

Make sure the Jenkins "Diamond" is mentioned in your specifications. It pays to take every precaution against substitution.

Genuine Jenkins Valves are furnished for practically every valve requirement—in standard, medium and extra heavy patterns.

#### JENKINS BROS.

80	White Street
524	Atlantic Avenue Boston, Mass.
133	No. Seventh Street
646	Washington Boulevard Chicago III

JENKINS BROS., LIMITED

Montreal, Canada

FACTORIES:

Bridgeport, Conn.

Elizabeth, N. J.

Montreal, Canada

London, England







### Chicago's first permanent settler

Where Jean Baptiste Point had his house here as carefully studied and considered as exterior beauty de Sable, from San Dom-

sidered as exterior beauty.

ingo, used to paddle his birch canoe, a double-deck bascule bridge jackknifes open to the flow of Great Lakes shipping. Clustered about the very spot on which in 1779 he erected the first house in Chicago -in which John Kinzie later lived-is a notable group of towering buildings.

In the spirit of the newer skyscraper architecture, each is a contribution to the City Beautiful plan of Chicago. Every detail of the equipment in the massive structures shown in the etching above was

It is especially gratifying to Crane that not only were its plumbing fixtures, valves, and fittings, selected for one of these buildings, but that all four of them were so equipped. Thus do these magnificent temples of commerce add their endorsement to the impressive roll of Crane installations. Perhaps your own next construction would worthily augment the list. Specify Crane plumbing and heating materials for initial appearance, minimum upkeep, long-lasting dependability, and final economy.

Address all inquiries to Crane Co., Chicago

GENERAL OFFICES: CRANE BUILDING, 836 S. MICHIGAN AVENUE, CHICAGO

Branches and Sales Offices in One Hundred and Fifty-five Cities

National Exhibit Rooms: Chicago, New York, Atlantic City, San Francisco and Montreal
Works: Chicago, Bridgeport, Birmingham, Chattanooga, Trenton, Montreal and St. Johns, Que.

CRANE EXPORT CORPORATION: NEW YORK, SAN FRANCISCO, MEXICO CITY, HAVANA
CRANE LIMITED: CRANE BUILDING, 386 BEAVER HALL SQUARE, MONTREAL CRANE-BENNETT, LTD., LONDON CIE CRANE: PARIS, BRUSSELS

## SHOWERS

# Especially Designed for Golf and Country Club Installations



Speakman Shower Installation in the Brinton Lake Club

THERE are several types of SPEAKMAN Showers which can be used for this purpose. The Brinton Lake Club near West Chester, Pa., uses the regular SPEAKMAN H-895 Mixometer Shower with Anyforce Head—placing both temperature and force of the shower under instant control. Both angle and overhead showers are part of this installation which is shown on the left.

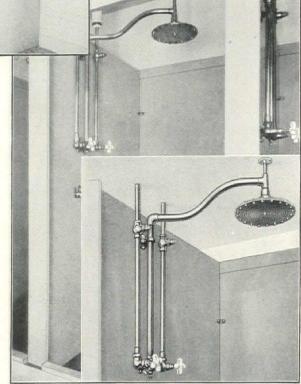
However, the Golf and Country Club Shower which is growing in popularity very fast, is shown at the right. The illustration was made from a photograph taken in the Manufacturers' Country Club near Philadelphia. They have several of these showers in this club. The valves are ¾ inch and the head twelve inches across and contains 666 holes.

We'll be glad to give you the complete specifications of the showers and stalls; also if you wish we'll send you our shower and fixture catalog made up for your files, A.I.A. Classification 29H3.

SPEAKMAN COMPANY

Wilmington

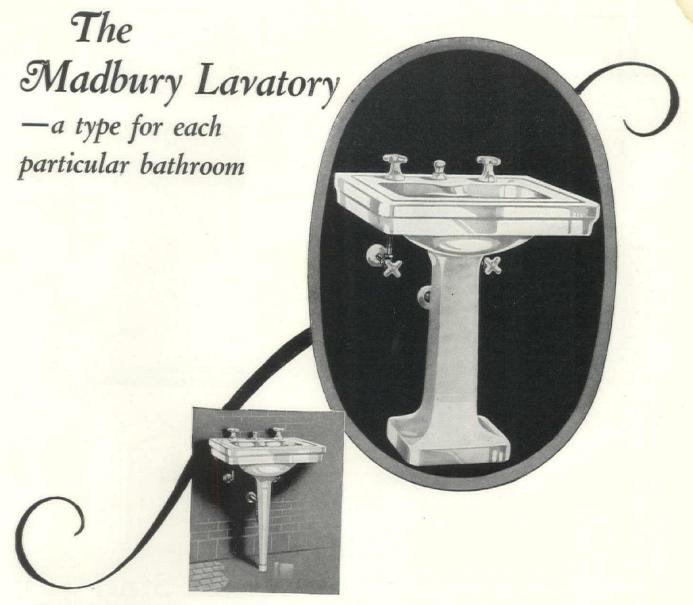
Delaware



In the Manufacturers' Country Club

SPEAKMAN SHOWERS

and FIXTURES



THE Maddock "Madbury" Lavatory of Durock is the last word in beauty, convenience, cleanliness and durability.

The larger illustration shows the pedestal style; the smaller, the leg style. Both are identical in every detail except the method of support.

Because the leg style costs less to manufacture, it may be furnished at a somewhat lower price than the pedestal style; also it may be supplied, if desired, in a smaller size.

Both styles are made of all white Durock, including trimmings. Durock will not chip, crack, craze nor discolor.

The "Madbury" is the only lavatory made with a self-cleansing overflow, insuring complete sanitation. Hot and cold water, mixed to any desired temperature, is directed to the center of bowl in a single stream. There is a large square bowl with anti-splash rim.

Durock lavatories remain new indefinitely. They can always be kept spotlessly clean by merely wiping with a damp cloth.

Write us for as many copies as you can use of our booklet, "Maddock Bathrooms". They will help you "sell" clients on quality fixtures, and make them more appreciative of such fixtures when recommended. There will be no charge for the booklets.

THOMAS MADDOCK'S SONS COMPANY

Oldest Sanitary Potters in America Trenton, N. J.

# MADDOCK

DUROCK Bathroom Equipment

### DUROCK

the perfect material for bathroom equipment

is stain proof



I ODINE is often dropped on the lavatory basin. It will leave an indelible stain on ordinary coated ware but can be readily wiped off of a Durock lavatory.

Durock cannot be stained.

# A fixture you will eventually specify



# A Solid Vitreous China Urinal Stall

Guaranteed not to Craze

While vitreous china has long been regarded as the ideal material for sanitary plumbing fixtures, its use in the construction of urinal stalls is of comparatively recent date. In fact, until made by Douglas, the production in vitreous china of so large a fixture as a urinal stall was thought to be practically impossible.

Douglas Urinal Stalls are the ONLY FULL-SIZED SOLID VITREOUS CHINA URINAL STALLS made — the result of intensive study and experimenting. They are of the same high quality materials and workmanship that have distinguished all Douglas products.

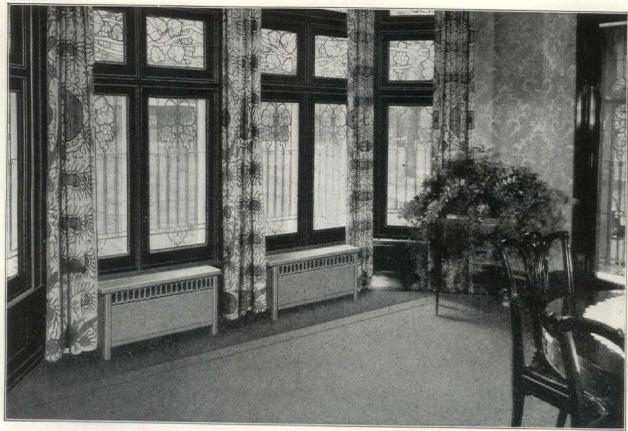
The superiority of vitreous china over other materials being well known, the advantages of Douglas Urinals will be apparent to everyone specifying and installing sanitary plumbing



fixtures. However, when writing the specifications for your next job where urinals are included, bear in mind that Douglas Vitreous China Urinal Stalls will not crack, craze, or discolor—that they are absolutely impervious—that they are easy to clean and keep clean—assuring the utmost in service and satisfaction.

THE JOHN DOUGLAS COMPANY

Makers of High-Grade Plumbing Fixtures CINCINNATI, OHIO



A typical installation of Visible Heat Cabinets. These cabinets are available in a wide range of sizes and styles.

## Trane Heat Cabinets

Heat Cabinet de-

liveries start in Sep-

tember. Orders re-

ceived now will be

acknowledged with

approximate ship-

ping date. Prompt

delivery is assured

on orders that come

in early.

Trane Heat Cabinets take the place of radiators. They were invented by Reuben N. Trane and developed and perfected in the Trane Engineering Laboratories to meet the demand for an improved method

of distributing heat.

The Heat Cabinet is a new application of convection heating. In effect, the heat is bottled up in the Cabinet and is released only in sufficient quantities to care for the demand. The Cabinet gives heat instantly when desired, or by merely adjusting a damper it can be turned off so that no heat units escape to the room.

As shown by the illustration above, a Heat Cabinet looks somewhat like a radiator enclosure. The principle of operation and the features of the Heat Cabinet, however, are vastly different than those of enclosed radiators.

All heating systems that use Heat Cabinets are known as Cabinet Heating Systems. Cabinet Heating can be used in connection with regular steam, vapor, vacuum, or hot

water heating equipment. No special design is necessary. No special heating system is necessary. The Cabinets are easily installed on any job where radiators could be used, or where radiators are used at present.

Their many good points are discussed at length in the pages of the Trane Heat Cabinet Catalog—their pleasing appearance, their light weight, their moderate cost, and above all, the perfect heat

control that is made possible by the Heat Cabinet principle.

If you haven't received your copy of this catalog, write for it.

The Trane Company, 220 Cameron Ave., La Crosse, Wis., manufacturers of vapor and vacuum heating specialties and pumps. Branches and sales connections at New York, Chicago, Boston, Cincinnati, Newark, Philadelphia, Buffalo, Cleveland, Detroit, Seattle, Los Angeles, Albany, Minneapolis, Salt Lake City, Greensboro, N. C., Zanesville, Ohio, Tampa, Fla., Battimore, Md., Des Moines, Ia., New Haven, Conn., Sheboygan, Wis., Kansas City, Mo. In England: 22-23 Clerkenwell Close, London, E. C. 1. In Canada: The Trane Co., 21-23 River St., Toronto, 2: Thomas Robertson & Co., 134 Craig St., West, Montreal; F. S. Murdoch, 310 Breadalbane, Winnipeg; A. B. Madden, 48 Sparks St., Ottawa. In China: C. J. Doughty & Co., 7 Jinkee Road, Shanghai.

### Reviews of Manufacturers' Publications

FEDERAL CEMENT TILE CO., Chicago. "The Roof for Permanence." A booklet on an important subject.

Interest of architects in roofing materials is never ending, particularly in those materials which by reason of their nature last forever. This booklet is issued to inform architects and builders regarding Federal Cement Tile, a material which while possessing maximum strength is of minimum weight, and since it cannot wear out or (except by use of extraordinary force) be broken, it will endure without repairs. Such a roof requires no painting or patching, and never rusts; heat or cold cannot break down its endurance, and even fire, the greatest of all destroyers, cannot damage it. Federal Glass Tile can be used when it is necessary that portions of a roof provide top-lighting.

### THE JOHN D. EMACK CO., Philadelphia and New York. "What Then is Thatchslate?" An answer to the question.

Certain architects who do much country house work have succeeded in capturing something of the skill which made notable the work of architects and builders a century or more ago. This applies not only in the matter of design but also in the use of materials, which, of course, has its effect upon the design. Architects and builders well know the value of the slates supplied by the John D. Emack Co. Slates can be cut, quarried, split or trimmed in quite a variety of ways, and this folder describes and illustrates what is known as "Thatchslate," obviously slate which when used for roofing gives the appearance and much of the texture of a thatched roof,—or as the folder puts it, "a roof thatched with slate instead of with straw." Slates of this particular variety come in several colors,—greens, grays, browns, purples, buffs and blacks, all highly valuable colors.

### EDWIN F. GUTH CO., St. Louis. "Guth Lighting Equipment." A brochure on lighting and on fixtures for lighting.

Lighting the interiors and even the exteriors of buildings properly necessitates the use of fixtures of many kinds,—fixtures suspended from ceilings, fastened to walls, or else the type called "portable," intended to be placed wherever it may be convenient to have them. In this brochure the Edwin F. Guth Company illustrates a vast number of the fittings which it carries in stock or makes to special order,—fixtures for banks, public buildings, clubs, churches, hospitals, residences and apartment buildings, stores, commercial and industrial plants, these fixtures made of metals of many sorts given finishes of different kinds. One valuable part of this brochure is given up to describing the type of illumination known as "Concealite," widely used for show windows, show cases, the chancels of churches or the prosceniums of theaters, and of interest is the page giving in percentages efficiency of different lighting units.

### ELEVATOR SUPPLIES COMPANY, INC., Hoboken. "Elevator Door Closer and Positive Electric Interlock."

Improvement in elevator equipment has kept pace with the development of the elevator. Perhaps it would be more accurate to say that development of the elevator has been made possible only by the ingenuity and resource which makers of their equipment have brought to their work. Prominent among manufacturers of such equipment has long been the Elevator Supplies Co., Inc., and in this brochure there are given for architects and builders details of their Elevator Door Closer and Positive Electric Interlock. The Elevator Door Closer and Positive Electric Interlock give the maximum of safety to elevators in modern buildings. The Positive Electric Interlock absolutely cuts off the power while the doors are open, and therefore makes it impossible for the operator to start the car while passengers are entering or leaving the elevator. With the Elevator Door Closer and Positive Electric Interlock it is impossible for a waiting passenger to open the door from the outside, even with the car on a level with the floor. The operator's efficiency is then increased, for thought of possibility of accident is practically removed from his mind.

COPPER & BRASS RESEARCH ASSOCIATION. New York. "The End of Rust Troubles;—Brass Pipe."

Those in charge of the building of the Cathedral of St. John the Divine are allowing to be put into it only the best of materials, their idea being to leave to the world an example of what is the best building practice today. It is the ambition of the builders to have archæologists 2000 years hence as greatly impressed by the remains of this great structure as students of today are by the imposing monuments of ancient Rome. It is to be noted that particular attention is being given to piping. This brochure dwells upon the well known merits of brass piping, proof, of course, against rust, which colors or stains water and porcelain fittings, and destroys the pipes themselves.

### BISHOPRIC MANUFACTURING CO., Cincinnati. "The Renaissance of Stucco." A work on its history and use.

The widespread use of stucco, which plays so conspicuous a part in modern building, is after all merely a revival of the use of a material centuries old. Wide use of stucco by the ancients was not caused by its being easily secured and applied as much as because it possessed certain qualities which rendered it particularly valuable, chief among which is its affording insulation which in hot climates prevents the penetration of heat to the interior of a house, just as (in cold climates) it protects or conserves what heat the interior enjoys and prevents its loss. This publication, as its title implies, reviews the use of stucco in the ancient world and gives some account of its recent use. It illustrates numerous structures old and new in various parts of the world for building which stucco has been used and describes some of the textured surfaces developed.

#### THE TRANE CO., La Crosse, Wis. "No More Radiators," And "The Trane Heat Cabinet." A new device for heating.

These two folders or brochures contain data regarding a device which is founded upon an entirely new application of the principle of distributing heat. The "Heat Cabinet," as its name implies, is a cabinet which contains or surrounds a heating element and which is constructed in such a way that it gives out heat by convection rather than by radiation. Expressed in different words, the amount of heat given off by the heating element depends almost wholly upon the amount of air passing through it; the giving of heat is entirely dependent upon the circulation of air around the cabinet. The Trane Heat Cabinet is such a basic invention that its features apply to all the accepted forms of direct radiator heating, such as hot water, steam, vapor, or vacuum. Air passes through the cabinet at a rate of 100 to 150 feet a minute, causing fast circulation. In ten minutes a room is heated to a comfortable temperature.

#### J. G. WILSON CORPORATION, New York. "Wilson Rolling Wood Doors." A helpful booklet on their use.

There are of course countless places where it is convenient to use doors which roll up out of the way instead of opening in regular door fashion. But it is by no means necessary that such doors be invariably of metal, and there are many places where rolling doors of wood are as useful as doors of metal, and sometimes use of wood is in fact preferable. For over 50 years Wilson Doors have been meeting a definite industrial need so satisfactorily and efficiently that they are now in successful use in many industrial plants throughout the world. Wilson Rolling Wood Doors are especially adaptable to garages, engine houses, chemical and refrigerating plants where strong acids or oxidizing fumes are present. They are specially constructed to attain the greatest ease in operation and a maximum long life unaffected by corrosion, buckling, warping, swelling, or shrinking. As the opened doors are coiled overhead, they allow full use of valuable floor space, and that Wilson Rolling Wood Doors are remarkably durable is shown by actual records of installations made many years ago that are still giving daily satisfactory service.



HOTEL MANGER, New York City: H. Craig Severance, New York, Architect; E. Smolka Plumbing Supply Co., New York, Jobbers; Jarcho Brothers, New York, Plumbers

TWELVE hundred and fifty rooms will be added to the great Manger chain of hotels in New York City with the completion this fall of the Hotel Manger.

The bathtubs in this fine hotel will be of Kohler make, in the well-known "Viceroy" built-in pattern. The installation will number 456 tubs, the remaining bathrooms being equipped with showers only. In addition there will be 1050 other Kohler fixtures.

The exceptional quality of Kohler Plumbing Fixtures, their beauty of design, their uniform whiteness of enamel (always signed with the name "Kohler"), and the fact that they cost no more than any other acceptable ware—these considerations give ample warrant for writing "Kohler" into any specification.

KOHLER CO., Founded 1873, KOHLER, WIS. Shipping Point, Sheboygan, Wis. Branches in Principal Cities



Factory Gates, Kohler The Kohler factory attains unique quality in Kohler plumbing fixtures and private electric plants because Kohler Village, with its beautiful homes and gardens, inspires unique quality

## KOHLEROFKOHLER

Plumbing Fixtures

#### Reviews and Announcements

WILLIAM H. LUTTON COMPANY, Inc., Jersey City. "Greenhouses of Quality." A booklet on model conservatories.

Careful study given to greenhouses by architects and builders of such structures has resulted in something which closely approaches perfection in their development,—and not only are they being used for the growing of plants, fruits, vegetables, etc., the purposes for which they are generally erected, but often for sheltering the bathing or swimming pools and squash courts being built on so many country estates. This very interesting brochure gives data on every possible detail of greenhouse construction: Building Sites and Orientation; Sizes of Compartments; Types of Construction; Roofs; Gutters; Glass; Heating; Service Buildings; etc. Views are given of many greenhouses which have been erected by these well known builders, several in coöperation with Duhring, Okie & Ziegler, of Philadelphia.

NATIONAL LEAD COMPANY, 111 Broadway, New York. "Dutch Boy Quarterly" Volume 4, Number 2.

Architects who are fortunate enough to receive this well edited little publication find that it is full of valuable matter. This particular issue for example contains a helpful article on "Color in the Hospital," proving that white need not necessarily be used to secure that sanitary cleanliness which should of course obtain in a hospital, and that certain colors possess high value in having a beneficial effect upon patients. The writer takes up a number of colors,—yellow, red, gray, blue, and green,—and analyzes the effect of each upon patients, showing why certain colors should be used and others avoided. Other articles in the same issue deal with the decorative value of leaded glass, and "Prevention of Stain on White Paint." Architects should ask to be put on the mailing list.

GRAYBAR ELECTRIC COMPANY, New York. "Graybar Housekeeping Appliances." A brochure on utilities.

That the application of electricity seems to have been made to household utilities of every kind in which movement is involved is suggested by this booklet which illustrates, lists and describes the housekeeping devices supplied by the Graybar Electric Company, which was recently formed to take over the supply department of the Western Electric Co. Clothes washers, wringers, vacuum cleaners with their various attachments, ironers, ranges for cooking, heaters, cooling fans and sewing machines are some of the appliances with which the brochure deals. The booklet not only lists and illustrates these utilities, but gives the specifications which architects and builders might reasonably require to provide for their proper use. The wide use which is being made of these and other similar devices is due, of course, very largely to the ingenuity which their makers have shown in adapting to so many practical purposes that most useful of forces,—electricity.

THE FLEXLUME CORPORATION, Buffalo. "Signs and Inscriptions in Architecture." A work on their proper use.

Architects find only too often that carefully designed exteriors and well considered interiors are disfigured and sometimes badly marred by use of the signs which present-day business methods find so necessary. Frequently these signs, bad enough in themselves, are made worse by use upon them of lettering which bears no relation whatever to the architectural character of a structure. That this need not be so is abundantly proved by this extremly useful and well produced brochure issued by a concern which shows considerable skill in reconciling the demands of Business with the claims of Architecture. It proves (first) that signs properly managed need not in the least injure the appearance of a building without or within, and (second) that there are types or styles of lettering in such close agreement with the different styles that their use emphasizes the architectural character and dignity of a structure. Greek, Roman, Romanesque, Gothic, Byzantine, Renaissance and Georgian types are considered, and lettering well adapted to each is shown. The brochure offers to those desiring them the services of the Flexlume Designing Department, equipped as it is with all possible facilities.

George Winkler announces the opening of new offices in the Moorhouse Building, Tampa, Fla.

Everett H. Merrill, formerly of 3981 West Sixth Street, Los Angeles, has opened new offices at 4475 Santa Monica Boulevard.

Wanted—For architect's office, representative to interview prospective clients. Architectural experience essential. Box 28, Architectural Forum, 383 Madison Avenue, New York.

B. Fraser, care of the Shanghai Land Investment Co., Ltd., 28 Jinkee Road, Shanghai, would be glad to receive catalogs from firms interested in sending building materials or specialities to his part of the world.

Eliel Saarinen and Henry Scripps Booth have established themselves in the Cranbrook Architectural Offices, Lone Pine Road, Bloomfield Hills, Birmingham, P. O., Mich. They would be glad to receive catalogs and other publications from manufacturers.

Teachers Wanted. For the school year beginning September 8, 1926, the School of Applied Arts of the University of Cincinnati is desirous of filling these new positions: One Assistant Professor, History of Architecture; (Major work in Mediæval and Modern Architecture.) One Assistant Professor, Interior Decoration. Three Assistant Professors, Principles of Design (Composition). One Assistant Professor, Landscape Architecture.

Address applications or inquiries to the Director, School

of Applied Arts, University of Cincinnati.

AMERICAN WALNUT MANUFACTURERS' ASSOCIATION, Chicago. "Walnut for Interior Woodwork and Paneling." A work on the many advantages of using walnut.

The possibilities of using walnut for interior trim are so many and so great that one wonders why it is not more frequently employed for work of the better class. The reason generally given would be, of course, that its cost prevents its more frequent use, and one of the most interesting details of this brochure is in its precisely answering this objection and giving the comparative costs of different woods. The cost of the interior trim of a typical room, for example, a room with baseboard and shoe moulding and low paneling, mantel, and the usual doors and trim about doors and windows, as illustrated on pages 7 and 8 of the booklet would be: American Walnut \$390; Mexican or African Mahogany \$390; Philippine Mahogany \$368; Quarter Sawed White or Red Oak \$355; English Oak \$425; Birch \$355; Quarter Sawed Red Gum \$342; Plain Gum, etc., \$330. From these figures it will be seen that the cost of walnut is really less than that of several woods likely to be used, and but a trifle more than that of birch or gum, woods frequently made use of. The booklet gives considerable useful information on the subject of use of walnut for floors of residences, a subject which is always important.

VAN RENSSELAER P. SAXE, C.E.

Consulting Engineer

STRUCTURAL STEEL CONCRETE CONSTRUCTION

Knickerbocker Building

Baltimore



# Damp-proof

The interior of this hospital will always be warm and drythe exterior walls will always retain their natural beauty

THE exterior walls of the newly completed Miner Physicians' Hospital in Plattsburg, New York, were treated with Hydrocide Colorless, the invisible waterproofing. In addition to keeping the interior of the building warm and dry, this material preserves the natural beauty of the brickwork. It prevents the walls from becoming discolored. It is absolutely invisible when applied.

Hydrocide Colorless penetrates the

brick and forms a non-conductive, protective layer. Since it contains no paraffin, it will not run in hot weather. It can be applied as easily during the winter months as during the summer. It can be painted. It will never collect dust.

Hydrocide Colorless will give you warm, dry, beautiful buildings. Buildings of which you can be permanently proud. Write us for further information and a generous demonstration sample.

# Hydrocide Colorless Waterproofing

#### Other Sonneborn Products

Lapidolith—The original concrete floor hardener. A liquid chemical that changes the floor surface to a fine, dense, crystal-like structure of flint-like hardness. Hundreds of millions of feet of concrete floor have been Lapidolized in leading industrial plants of the country.

Cemcoat—A paint that stays white longer than any similar paint; can be washed again and again; sticks to brick or concrete as easily as to wood; and usually requires one less coat. Made for both interiors and exteriors, in white and colors and in gloss, eggshell, or flatenamel finish.

Lignophol—A preservative dressing for wood floors that penetrates and restores the natural oils and gums of the wood. Lignophol prevents rotting, splintering and drying out; it is not sticky; it can easily be washed; and it does away with ordinary floor oils.

Stormtight — The famous semi-liquid compound for mending and preserving roofs. The thick, adhesive rubber-like material can be applied by anyone, over any kind of roof, and gives a tight new surface that lasts for years. Made in four colors. Mends a single leak or makes an entire roof water-tight.

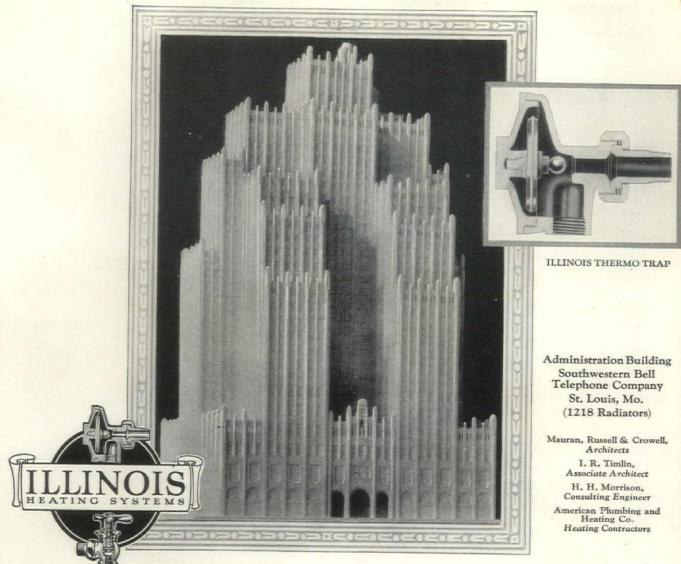
Send for free samples of these products

### L. Sonneborn Sons, Inc.

114 Fifth Avenue, New York City

### Index to Advertising Announcements

	18	Frink, Inc., I. P	98	Nelson Corp., The H. W	108
Acme Brick Company		Fulton Company, The	145	Never Spire Sear Company	198
Adam Electric Company,	108	Fulton Company, The		North Western Expanded Metal Co.	5
Alberene Stone Company	26	- C F1	118	Norton Company	112
American Blower Company	171	General Fireproofing Company 51,	110	TOTAL COMPANY	
American Blower Company The	39	Georgia Marble Company, The	14	Otis Elevator Company	26
American Brass Company, The	32	Gillis & Geoghegan	92	Otis Elevator Company	
American Cement Tile Mfg. Co		Glidden Company, The	92	Paine Lumber Co., Ltd	128
American Enamel Brick & Tile Co.	37	Glidden Company, The	168	Paine Lumber Co., Ltd.	40
American Face Brick Association	12	Goder Incinerator Company		Palmer Lime & Cement Co	
American Laundry Machinery Co.	185	Gorham Company, The	91	Payne Studios, Inc., The Geo. Hardy	80
American Laundry Wachinery	162	Graybar Electric Company	33	Pecora Paint Company	90
American Natideol Company		Guastavino, R., Company	7	Peerless Unit Ventilation Co., Inc.	167
American Seating Company	77	Guastavino, K., Company	96	Peerless Offic Ventification Co.,	180
American Sheet and Tin Plate Co.	114	Guth Company, The Edwin F	7.0	Pfaudler Co., The	
American Stove Company	121			Pittsburgh Reflector Company	99
American Stove Company	72	Hamlin, Irving	56	Portland Cement Association	38
American Walnut Mfrs. Ass'n		Hanley Company, Inc	9	Pratt & Lambert, Inc	82
Anchor Post Iron Works	92	Hanley Company, me	100	France & Lambert, me	
Appalachian Marble Company	6	Hart & Hegeman		Ramp Buildings Corporation	1.1
Armstrong Cork and Insulation		Hartmann Sanders Co	128	Ramp Buildings Corporation.	3
Armstrong Cork and	147	Hauserman Co., The E. F	56	Raymond Concrete Pile Company	
Company	17	Heggie Simplex Boiler Corporation	13	Reeves Company, Robert C	90
Armstrong Cork Co		Hess Warming & Ventilating Co	168	Richards Wilcox Mfg. Co2nd Co	over
Art Metal Construction Company	136	Hess Warming & Ventuating	130	Ritter Lumber Co., W. M	127
Athey Company	132	Higgin Mfg. Co			86
Atlantic Insulated Wire & Cable Co.	131	Hockenbury System, Inc., The	102	Rookwood Pottery Company, The	
Atlantic Insulated wire & Cable Co.	122	Holtzer-Cabot Electric Co	107	Ruberoid Co., The	114
Austral Window Co		Home Owners' Service Institute	29	R. U. V. Co., Inc., The	178
Automatic Electric Company	158	Home Owners Bervice Income	116		
		Hope & Sons, Henry		Samson Cordage Works	114
Bakelite Corporation	46	Hydrex Asphalt Products Corp	26	Sandusky Cement Company 3rd C	over
Bakente Corporation	154		011	Sandusky Cement Company	56
Barber Asphalt Company	113	Illinois Engineering Company	211	Sanymetal Products Co., The	
Barrett Company, The		Imperial Brass Mfg. Co., The	194	Sargent & Company	52
Beardslee Chandelier Mfg. Co	80	Improved Office Partition Company.	. 68	Schumacher & Co., F	75
Beaver Products Co. Inc	43	Improved Office Partition Company.	164	Sellers & Sons Co., G. I	138
Beaver Froducts Co. The	126	International Heater Co			84
Birch Manufacturers, The	28	International Nickel Co	174	Sherwin-Williams Co., The	
Bird and Son, Inc				Simplex Wire and Cable Co	126
Biscayne Boulevard Ass'n	179	Jacobson Mantel & Ornament Co	80	Smith Co., The F. H	175
Bonded Floors Company	73	Jacobson Wanter & Offiament Co.	200	Smith & Egge Mfg. Co., The	102
Bonded Floors Company	94	Jenkins Bros		C lass Sans Inc. I	209
Brasco Manufacturing Co	108	Johnson Service Company	124	Sonneborn Sons, Inc., L	202
Bull Dog Floor Clip Co	100	Johnson Co., S. T	166	Speakman Company	
		Johnson		Spencer Heater Company	163
California White and Sugar Pine			48	Spencer Turbine Company, The	182
Camfornia white and	155	Kalman Steel Company		Standard Conveyor Co	186
Mfrs. Ass'n	153	Kawneer Co., The	93		
Carey Company, The Philip		Kelsey Heating Company, The	168	Standard Gas Equipment Corp	123
Carney Company, The	151	Kensington Mfg. Company	71	Stanley Works, The	55
Carter-Bloxonend Flooring Company	41	Kensington iving. Company	182	Straus & Co., S. W	140
Casement Hardware Company, The	116	Kerner Incinerator Co., The	4		
Casement Hardware Company,	143	Kewanee Boiler Company		Thorn Co., J. S	137
Celotex Company, The		Kewanee Private Utilities Co	128	Toch Brothers	86
Chamberlin Metal Weather Strip Co.	134	Kewaunee Mfg. Co	194	loch Brothers	
Chemical Treatment Co., Inc., The	177	Rewaunee Mrg. Co. Mrg. Co.	117	Trane Company, The195,	200
Chemical Frederica	190	Keystone Roofing Mfg. Co	190	Trenton Potteries Co	197
Chicago Pump Co	58	Kny-Scheerer Corporation of America		Tri-Lok Company, The	31
Circle A Products Corporation		Kohler Company	207	Truscon Steel Co	2
Clinton Metallic Paint Co	28			Truscon Steel Co	64
Clow & Sons, James B	149	Lehigh Portland Cement Co104	, 105	Turner Construction Company	
Coldak Corporation2	0-21	Long-Bell Lumber Co., The	129	Tuttle & Bailey Mfg. Co	78
Coldak Corporation	63	Long-Bell Lumber Co., The	23		8202
Columbia Mills, Inc		Louisville Cement Co		United States Gutta Percha Paint Co.	81
Common Brick Mfrs. Ass'n	16	Ludowici-Celadon Company, The	. 115	United States Gypsum Company	187
Compound & Pyrono Door Co., The	8	Lupton's Sons Co., David	133	United States dypsum Company	194
Concrete Engineering Co., The	181	Lupton a bone		United States Mineral Wool Co	
Concrete Engineering Co., The	50	MacBeth-Evans Glass Co	97	United States Rubber Co	109
Concrete Surface Corporation		MacDeth-Lyans Glass Thomas	203	Universal Portland Cement Co	66
Congoleum-Nairn, Inc	3-30	Maddock's Sons Co., Thomas		Utica Heater Company	160
Copeland Products, Inc	25	Maple Flooring Manufacturers' Ass'n	110	Offica ficater company	
Corbin, P. & F	54	Martin Varnish Co	88	Valentine & Company	83
Corbin, r. & T	201	Mason Fibre Company	19		120
Crane Company	139	Massillon Steel Joist Company—4th	Cover	Van Range Co., John	
Crittall Casement Window Company		Massillon Steel Joist Company	53	Van Zile Ventilating Co	122
Curtis Company	125	McKinney Mfg. Company		Vitrolite Company, The	176
Curtis Lighting, Inc	95	Midwest Air Filters, Inc	156	Vortex Mfg. Company	44
Curtis Lighting, inc.	102	Milwaukee Corrugating Co	119	vortex Mig. Company	
Cutler Mail Chute Co		Mississippi Wire Glass Co	116	ave at Archa Angla	74
		Mississippi wire diass co	24	Wallpaper Mfr's Ass'n	
Davey Tree Expert Company	106	Moulding Brick Co., Thos	24	Warman-Cook	86
Dixon Crucible Co., Joseph	103	Mount & Robertson, Inc	57	Warren Webster & Co	165
Dixon Cracing Con Joseph	204	Mueller Company	199	Wasmuth-Endicott Company	122
Douglas Company, The John	170	Murphy Door Bed Co., The	79	Westinghouse Elec. & Mfg. Co	101
Dunham Company, C. A	1 1 11	Murphy Door Dea Co., The Tritter			
Du Pont Nemours & Company				Wickwire Spencer Steel Co	180
	135	Murphy Varnish Company	0,		
Durafley Company, The			100000	Wilde Company, W. B	161
Duraflex Company, The	135	Nash Engineering Co	183	Wilde Company, W. B	161
Duraflex Company, The  Duriron Co., The	135 108	Nash Engineering Co	183	Wilde Company, W. B	49
Duraflex Company, The  Duriron Co., The	135 108 196	Nash Engineering Co National Council for Better Plaster-	183	Wilde Company, W. B	49 27
Duraflex Company, The  Duriron Co., The	135 108 196 212	Nash Engineering Co	183 45	Wilde Company, W. B	49 27 160
Duraflex Company, The  Duriron Co., The	135 108 196	Nash Engineering Co	183 45 1	Wilde Company, W. B	49 27
Duraflex Company, The.  Duriron Co., The	135 108 196 212	Nash Engineering Co	183 45 1 87	Wilde Company, W. B	49 27 160 42
Duraflex Company, The  Duriron Co., The	135 108 196 212 10	Nash Engineering Co	183 45 1 87	Wilde Company, W. B	49 27 160
Duraflex Company, The.  Duriron Co., The  Eljer Company.  Emack Co., John D.  Excelso Specialty Works.	135 108 196 212 10 196	Nash Engineering Co	183 45 1 87 02-193	Wilde Company, W. B	49 27 160 42 184
Duraflex Company, The.  Duriron Co., The	135 108 196 212 10 196	Nash Engineering Co National Council for Better Plastering, The National Fire Proofing Company National Lead Company National Metal Molding Co	183 45 1 87 92-193 2, 173	Wilde Company, W. B	49 27 160 42
Duraflex Company, The.  Duriron Co., The	135 108 196 212 10 196	Nash Engineering Co	183 45 1 87 92-193 2, 173 159	Wilde Company, W. B. Williams Oil-O-Matic Heating Corp. Wilmot Castle Co Wilson Corporation, The J. G Woodville Lime Products Co Young Pump Company Zapon Company, The	49 27 160 42 184 85
Duraflex Company, The.  Duriron Co., The	135 108 196 212 10 196	Nash Engineering Co	183 45 1 87 92-193 2, 173 159 30	Wilde Company, W. B. Williams Oil-O-Matic Heating Corp. Wilmot Castle Co Wilson Corporation, The J. G Woodville Lime Products Co Young Pump Company.  Zapon Company, The Zenitherm Company	49 27 160 42 184 85 76
Duraflex Company, The.  Duriron Co., The	135 108 196 212 10 196 . 189 34 22	Nash Engineering Co	183 45 1 87 92-193 2, 173 159 30	Wilde Company, W. B. Williams Oil-O-Matic Heating Corp. Wilmot Castle Co Wilson Corporation, The J. G Woodville Lime Products Co Young Pump Company Zapon Company, The	49 27 160 42 184 85
Duraflex Company, The.  Duriron Co., The	135 108 196 212 10 196 , 189 34	Nash Engineering Co	183 45 1 87 92-193 2, 173 159 30	Wilde Company, W. B. Williams Oil-O-Matic Heating Corp. Wilmot Castle Co Wilson Corporation, The J. G Woodville Lime Products Co Young Pump Company.  Zapon Company, The Zenitherm Company	49 27 160 42 184 85 76



Quality is Worth Its Price

THE far-seeing, master minds that conceived this majestic structure know that Quality is Worth Its Price. To insure the utmost in heating comfort and satisfaction they took the precaution to specify an ILLINOIS Vacuum System. To every notable architect and engineer ILLINOIS HEATING SYSTEMS is a familiar name. They know of the overwhelming evidence of satisfactory installations—of faultless performance—of satisfied owners. ILLINOIS HEATING SYSTEMS are largely preferred by architects and consulting engineers—whose discerning judgment can be safely accepted as a criterion.

EVERY Architect Should Have Bulletin 21

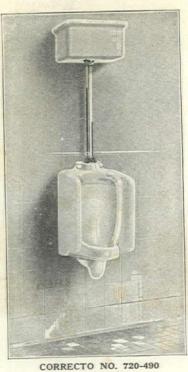
REPRESENTATIVES IN 40 CITIES OF U.S.A.

ILLINOIS ENGINEERING COMPANY
ROBT. L. GIFFORD President INCORPORATED 1900
CHICAGO

### ELJER Answers the Call for Greater Sanitation



TACOMA NO. 590





ELJER HANGER

ORE and more the profession is leaning toward clear floors in public and semipublic washrooms.

The Eljer fixtures shown furnish the means for accomplishing this desired result.

#### TACOMA WALL CLOSET

The Tacoma Jet Action Wall Closet (for flush valve only) operates with a small amount of water-giving an instantaneous and thorough flush. It has a large trapway, extra large water area, deep seal and extended sanitary flushing lip.

Can also be furnished with plain rim-back spud or vented to meet varying needs.

#### ELJER HANGER

Eliminates the need of a utility corridor and special fittings.

The bowl is bolted tightly to the hanger with a moulded asbestos gasket between the outlet flange and bowl assuring a rigid support and permanently tight joint.

### ELJER

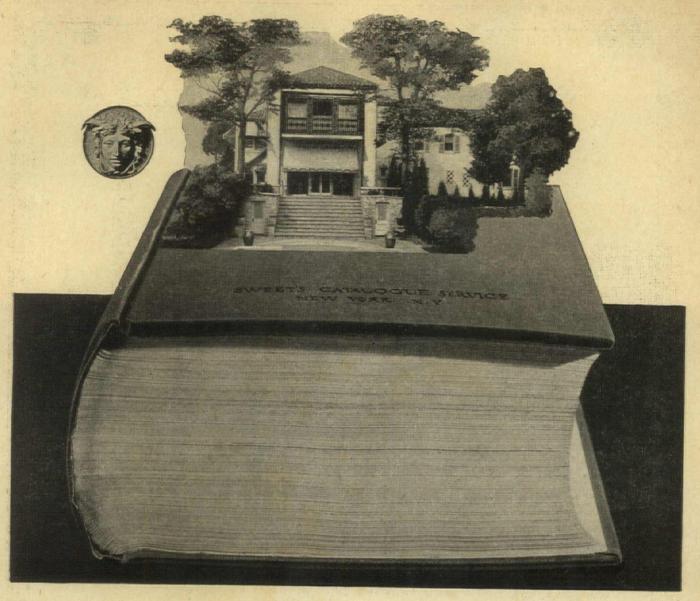
#### CORRECTO URINAL

The Correcto Wall Pattern Stall Urinal (for tank or flush valve) has integral side shields-making a complete unit, and obviating the need of marble partitions. It has a trap with cleanout which effects an additional saving in material and labor.

It is Eljer highest quality genuine vitreous china, guaranteed not to crack, craze or discolor.

ELJER COMPANY, FORD CITY, PA.

Sales offices in principal cities of the country



## "It gives me More Time to Create!"

GHIS Company's Catalogs in the Twentieth Edition of "Sweet's" not only provide reliable and accepted specifications for the uses of Medusa Products, but they greatly simplify the detail of specification writing. By shortening routine, they thus make available more hours for truly creative work.

This seems to us a peculiarly appropriate service for our Company to render: because Medusa White Portland Cement is recognized by Architects everywhere as the ideal element

from which to create unique and lovely, but practical and efficient exteriors for homes and public buildings. And of course Medusa White Cement has many other notable uses, beside stucco.

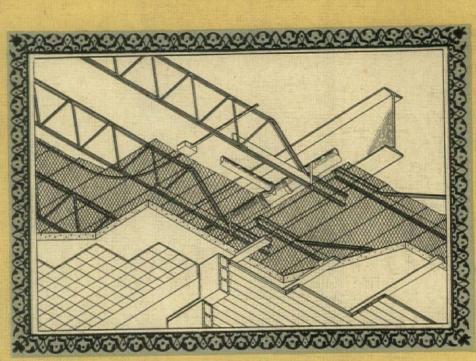
Supplementing the information in "Sweet's"—pages 118-121; 341-349; 1716-1717—we issue interesting Booklets in Architectural sizes, which we shall be very pleased to send upon request.

Our Technical Department will also be pleased to contribute practical suggestions on special matters whenever its services may be desired.

THE SANDUSKY CEMENT COMPANY, The Engineers' Building, CLEVELAND, OHIO

Manufacturers of Medusa White Portland Cement, (Plain and Waterproofed); Medusa Waterproofing (Powder or Paste); Medusa Gray Cement (Plain and Waterproofed); and Medusa Cement Paint.





Massillon Bar Joists in the Emerson Hotel, Mt. Vernon, Illinois H. L. Hulsebus, Peoria, Ill., Architect: Wm. R. McCoy, Mt. Vernon, Ill., Contractor

### The Simplicity of Massillon Bar Joist Fireproof Floor Construction

NO TYPE of fireproof floor is so simply, easily and quickly erected as that built with Massillon Bar Joists. And no type of construction provides a better, more dependable fireproof floor for all kinds of buildings, from homes to skyscrapers.

The detail drawing above shows the simplicity of construction. The joists are quickly placed in position and covered with metal lath. A thin slab of concrete serves as a base for the finish floor. This may be wood, tile, terrazzo or cement.

Each Massillon Bar Joist is suitable for a variation in spans. 18 standard joists meet all spans from 4 feet to 30 feet 6 inches. All materials are available for immediate shipment from stock. Construction time is cut to the minimum.

The open web construction simplifies and reduces the cost of piping installations. The reduced weight of Massillon Bar Joist floor panels provides structural savings in all supporting members down to the footings. Write for literature and designing information.

### THE MASSILLON STEEL JOIST COMPANY, Canton, Ohio

Plants at Canton and Massillon, Ohio. Sales Offices in all principal cities. Canadian Manufacturing and Sales Agents: Sarnia Bridge Company, Ltd., Sarnia, Ontario

