

NA
L
I56
K43
no.1

4311

13 5 34204 2 3
2023 01



IRVING K. FOND, DES.

LORADO TAFT, SCULPT.

UNIVERSITY OF MICHIGAN
GENERAL LIBRARY



Entered at the Postoffice at Chicago as second-class matter.

CONTENTS.

EDITORIAL:

Lack of Responsibility Defeats Object of Revised Building Laws.....	1
RAMBLES IN AND ABOUT FLORENCE—HER ART TREASURES AND THE CAMPANILE. By J. E. O. Pridmore, Architect (Concluded).....	2
THE SIGNIFICANCE OF ROME TO THE AMERICAN ARCHITECTURAL STUDENT. By Austin W. Lord.....	3
REGARDING SCHEDULE OF CHARGES.....	5
NOT BUILDING LAWS, BUT FIREPROOF STRUCTURES.....	6
DRAFTS AND CHIMNEYS.....	6
SYNOPSIS OF REPORT OF CORONER'S JURY ON IROQUOIS THEATER DISASTER.....	6
A HOLLOW-TILE FIREPROOFING TEST.....	7
ASSOCIATION NOTES: Architectural League of New York—Montana State Association of Architects.....	7
MOSAICS.....	7
OUR ILLUSTRATIONS.....	7
INDEX TO ADVERTISEMENTS.....	ix

NORTH-WESTERN TERRA COTTA CO.

WORKS AND OFFICE:

Clybourn and Wrightwood Avenues.

BRANCH OFFICE: 1118 Rookery Building,
CHICAGO.

A NEW ROOFING TILE

WITH DOUBLE INTERLOCK AT TOP AND SIDES

ABSOLUTELY RAIN AND SNOW PROOF

NOW ON THE MARKET

Being made of stiff clay with metal dies under a pressure of fifty tons, it is both exceedingly light and dense, and will not break up nor flake off under the action of the elements. *Better than other tile. As cheap as good slate.*

THE NATIONAL TILE ROOFING CO.
LIMA, OHIO, U. S. A.

J. W. TAYLOR,

REMOVAL NOTICE:

After May 1, 1902, Monon Bldg., 324 Dearborn St. Telephone No. 1500 Harrison.

ARCHITECTURAL PHOTOGRAPHS,
BUILDINGS, INTERIORS, DETAILS, ETC.

Promise to purchase two dozen from the lot at \$4.00 per dozen, unmounted, and I will send 200 from which to make the selection.



THE WINSLOW BROS. COMPANY

CHICAGO

**ORNAMENTAL IRON AND BRONZE AND
MONUMENTAL BRONZE STATUARY**

THE WINSLOW ELEVATOR & MACHINE CO.

HIGH-GRADE ELECTRIC AND HYDRAULIC ELEVATORS

Peterson Nursery



**TREES
AND
SHRUBS**

ORDER NOW

168 La Salle Street, CHICAGO

Send for illustrated price list and special offer of shrub collections.

THE SOCIETY OF BEAUX-ARTS ARCHITECTS

has established

A FREE COURSE OF STUDY
open to draughtsmen and students of any city, modelled on the general plan pursued at the Ecole des Beaux-Arts in Paris, and comprising frequent problems in Orders, Design, Archeology, etc. For information apply to the Secretary of the Committee on Education, 3 E. 33d St. N. Y. City.

DRAUGHTSMAN WANTED

Wanted, Draughtsman who is first
class at **Perspective Rendering**

R. H. Hunt, Architect, Chattanooga, Tenn.

Advance News

INDICATING

Chances to Sell

PLANS, MATERIALS, FIXTURES, FURNITURE, MACHINERY,

May be secured with promptness, accuracy and thoroughness, and at reasonable rates, from

THE PRESS CLIPPING BUREAU,

ROBERT AND LINN LUCE,

75 Park Place, NEW YORK.
Pike Bldg., CINCINNATI.

68 Devonshire St., BOSTON
Cooper Bldg., DENVER.

Please mention THE INLAND ARCHITECT when corresponding with Advertisers.

Ventilation

By many people ventilation is regarded as a luxury rather than a necessity. A crowd and bad air are looked upon as inseparable, and, with old-fashioned methods of ventilation, they are. However, such air is dangerous to health and, moreover, may be avoided by the application of engineering skill. We have designed and constructed more heating and ventilating equipments than any one else in the world, and we offer you the benefit of our experience. Send for our pamphlet I-112 A, entitled:

"Mechanical Ventilation and Heating"

B. F. STURTEVANT CO.

BOSTON, MASSACHUSETTS

NEW YORK

CHICAGO

PHILADELPHIA

LONDON

Designers and Builders of Heating and Mechanical Draft Apparatus, Steam Engines and Electrical Machinery

329



If tin had not been the best roofing would they have put it upon Independence Hall? If "Taylor Old Style" had not been the best tin could they not have secured another? "Taylor Old Style" tin has no fault but good conduct.

N. & G. TAYLOR COMPANY

ESTABLISHED 1810

Philadelphia

SPECIFICATION REMINDER

FOR THE USE OF

Architects, Builders

AND OTHERS.

A complete summary of items of every branch of building work. A very useful book for those who have to do with the erection and construction of buildings. Price, 50 cents per copy. Apply to

WILLIAM H. SAYWARD,

Secretary of the National Association of Builders,

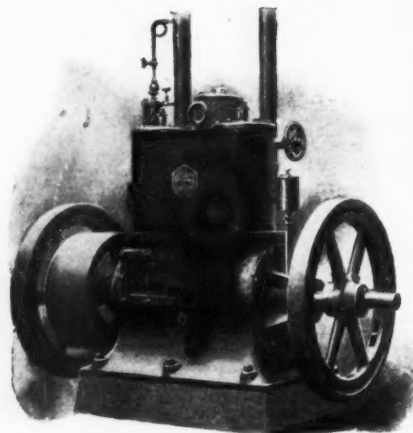
166 Devonshire St.

BOSTON, MASS.

Please mention THE INLAND ARCHITECT when corresponding with Advertisers.

Westinghouse Single-Acting Steam Engines

5 H. P. to 400 H. P.



Westinghouse Standard Steam Engine

**SELF-CONTAINED CONSTRUCTION
EFFICIENT OPERATION**

For particulars address nearest sales office of

The Westinghouse Machine Co.,

Works, East Pittsburg, Pa.

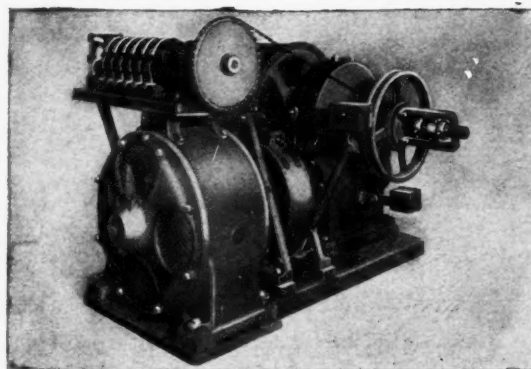
Sales Offices

New York, 10 Bridge St.
Boston, 131 State St.
Pittsburg, Westinghouse Bldg.

Chicago, 171 La Salle St.
Detroit, Union Trust Bldg.
Philadelphia, Stephen Girard Bldg.

Designers and Builders of

Steam Engines, Gas Engines, Steam Turbines, Roney Mechanical Stokers.



Westinghouse Induction Motor geared to Elevator Hoist

Westinghouse Motor-Driven Elevators

**Noiseless
Reliable
Economical**

Circular 1050 gives particulars

Westinghouse Electric & Mfg. Co.

Pittsburg, Pa.

Sales Offices in all Large Cities

THE WINKLE TERRA GOTTA CO.

MANUFACTURERS OF

Architectural Terra Cotta

IN ALL COLORS.

OFFICE:

**Rooms 502 and 503, Century Building,
ST. LOUIS, MO.**

Works: CHELTENHAM, ST. LOUIS.

The Traveler
Who contemplates a trip to Colorado, Utah, California or the Northwest should know that
The Denver & Rio Grande R. R.
widely known as "The Scenic Line of the World," has more scenic attractions than any other route across the continent, traversing as it does the Rocky Mountain Region through Royal Gorge, Canon of the Grand River, Glenwood Springs, Marshall Pass, Black Canon, Castle Gate, and the world-famed Salt Lake City. Its three through daily trains are equipped with the latest improved cars of all classes. Its dining car service is unsurpassed. For illustrated pamphlets address
S. K. HOOPER, G. P. & T. A.
Denver
Colo.

Please mention THE INLAND ARCHITECT when corresponding with Advertisers.

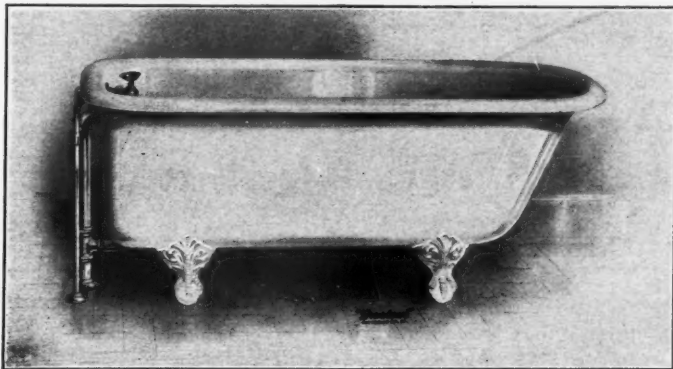


"Standard"



PORCELAIN ENAMELED BATHS

surpass all others in quality, design and durability, and the large numbers of exclusive patterns in which they are made permit the selection of a bath that will harmonize with the decorative treatment of the bathroom, no matter how modest or elaborate it may be.



THE "OCCIDENT"

PLATE 101-G

is the choice of many who desire a sanitary, modern equipment without expending more than is necessary to provide these most essential features. The "Occident" is made in five sizes, with trimmings as shown; also with Imperial Waste and Overflow or Bell Supply Fittings.

The exterior finish of the bath is a matter worthy of the consideration of every architect. The "Standard" Bath Decorations, as applied by skilled decorators, with special facilities for the purpose, makes the exterior as inviting as

the interior. The reasonable cost at which we furnish exterior finishes should cause every bath to be specified with one of our factory finishes, thus insuring satisfaction to the client, instead of the expense and annoyance resulting from the application of ordinary paint by unskilled hands.

Every piece of "Standard" Ware bears our "GREEN and GOLD" guarantee label and has our name "Standard" or initials "S. S. M. Co." cast in relief on the exterior. No others are genuine.

Standard Sanitary Mfg. Co.

PITTSBURG, U. S. A.

PORCELITE

Is the Only Enamel Paint

That has stood the test of ten years' wear and retained its durability, permanent high gloss, and has not checked or cracked. :: :: ::

Interior Woodwork
Plastered Walls
Brickwork, Metals

Paint with
PORCELITE

**The Thomson
Wood Finishing Co.**

Varnish, Enamel and Wood Filler
Manufacturers
Inventors and Sole Makers

Office, 115 N. Fourth Street
PHILADELPHIA, PA.

WANTED A single man who is especially artistic in designing medium price dwellings, making perspectives for book half-tones. State experience, references and terms. Address,

D. S. HOPKINS, Architect,
Grand Rapids, Mich.

"That Settles It"

**WEBSTER'S
INTERNATIONAL
DICTIONARY**



RECENTLY ENLARGED

25,000 New Words, etc.
New Gazetteer of the World.
New Biographical Dictionary.
Edited by W. T. HARRIS, Ph.D., LL.D.
New Plates Throughout. Rich Bindings.
2380 Quarto Pages. 5000 Illustrations.

Will readily settle questions about words, noted persons, places, scientific subjects, etc.

Should be in
Every Home, School, and Office.

Also Webster's Collegiate Dictionary.
1100 Octavo Pages. 1400 Illustrations.

FREE "A Test in Pronunciation"
also illustrated pamphlets.

G. & C. MERRIAM CO., Springfield, Mass.

ORNAMENTAL IRON

STAIRS

STORE FRONTS

ELEVATOR ENCLOSURES

FENCES AND RAILINGS

SIDEWALK LIGHTS

SKYLIGHTS

Brown Bros. Mfg. Co.

Established in 1860

22d St. and Campbell Avenue

CHICAGO

Telephone Canal 115

Please mention THE INLAND ARCHITECT when corresponding with Advertisers.



Dexter Portland ...Cement...

Highest Standard Attainable for Pavement and Concrete Work.

SAMUEL H. FRENCH & CO., Sole Agents,
Established 1844. **PHILADELPHIA.**

TEL. HARRISON 3652

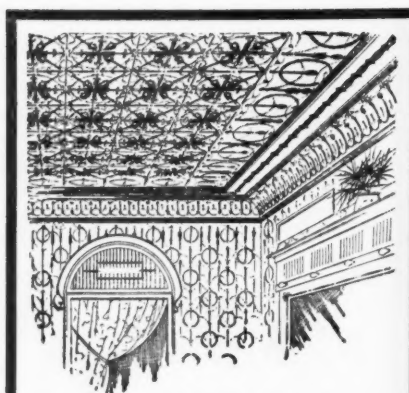
THOMAS HAWKES
LANDSCAPE ARCHITECT

DESIGNS PREPARED FOR PARKS,
CEMETERIES, PRIVATE ESTATES, SUB-
DIVISIONS, ETC.

CORRESPONDENCE SOLICITED

1532 MONADNOCK BLOCK

CHICAGO



Berger's Metal Ceilings

Are symmetrical and pleasing to the eye and command the admiration of all. They can be used in all classes of buildings, are easy to apply, and highly ornamental. They don't shrink, crack, get water-soaked, or fall off. They are safe and sanitary. Their durability makes them the most economical ceilings in existence. Our "Classified Designs" embrace a variety of styles, and there is no building that we can not match in its style of architecture. Send for our booklet "A New Idea in Metal Ceilings"—it's free.

The Berger Mfg. Co., Canton, Ohio
Eastern Branch, 210 E. 23d St., N. Y.
Western Branch, 19-21 S. Main St., St. Louis, Mo.

AUDITORIUM LIGHTING is a SPECIALTY

in itself. We make a specialty of it. The Frink Reflector is made up on special angles to meet the conditions found in each case, no two auditoriums being just alike; hence its uniform success. No church lighting should be undertaken without considering it. To consider is to adopt. Designs for every style of architecture.

I. P. FRINK, 551 Pearl Street, NEW YORK

EXPANDED METAL

For Fireproofing and Concrete Construction

ASSOCIATED EXPANDED METAL COMPANIES Room 1216, 256 Broadway
NEW YORK



AMERICAN SIDEWALK LIGHT CO.

MANUFACTURERS OF ALL KINDS OF

Concrete and Hyatt Sidewalk, Floor and Skylight Work,
AND ALL KINDS OF IRONWORK.

Coal-Hole Covers of every description always on hand.

Tel. Monroe 643.

156-158 West Ohio St., CHICAGO.

Put into the White House by the U. S. Government.

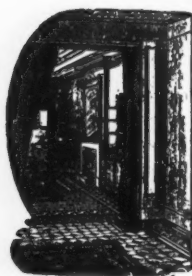


F. E. CUDELL'S

Patent Sewer-Gas and Backwater Trap

For Wash-Bowls, Sinks, Bath and Wash Tubs,

CLEVELAND, OHIO.



Hardwood Floors

Wood Carpets, Parquet
Floors, Rug Borders.

Send for book of designs.

E. B. MOORE & CO.

37 Randolph Street,
CHICAGO, ILL.

Hydraulic Press Brick Co.

Missouri Trust Building, ST. LOUIS, MO.

**TOTAL
ANNUAL
CAPACITY,
300,000,000
BRICKS.**

American Hydraulic Press Brick Co.,
Chicago Hydraulic Press Brick Co.,
Cleveland Hydraulic Press Brick Co.,
Eastern Hydraulic Press Brick Co.,
Findlay Hydraulic Press Brick Co., Findlay and Toledo, Ohio.
Illinois Hydraulic Press Brick Co.,
Kansas City Hydraulic Press Brick Co.,
Kelley Brick & Tile Co.,
Menomonic Hydraulic Press Brick Co.,
New York Hydraulic Press Brick Co.,
Ohio Press Brick Co.,
Omaha Hydraulic Press Brick Co.,
Union Press Brick Works,
Washington Hydraulic Press Brick Co.,

St. Louis, Mo.
Chicago, Ill.
Cleveland, Ohio.
Philadelphia, Pa.
St. Louis, Mo.
Kansas City, Mo.
West Superior, Wis.
Minneapolis, Minn.
Rochester, N. Y.
Zanesville, Ohio.
Omaha, Neb.
St. Louis, Mo.
Washington, D. C.

CONVENIENT TRAINS

Leave St. Paul and Minneapolis daily

... VIA ...

Wisconsin Central R'y

... FOR ...

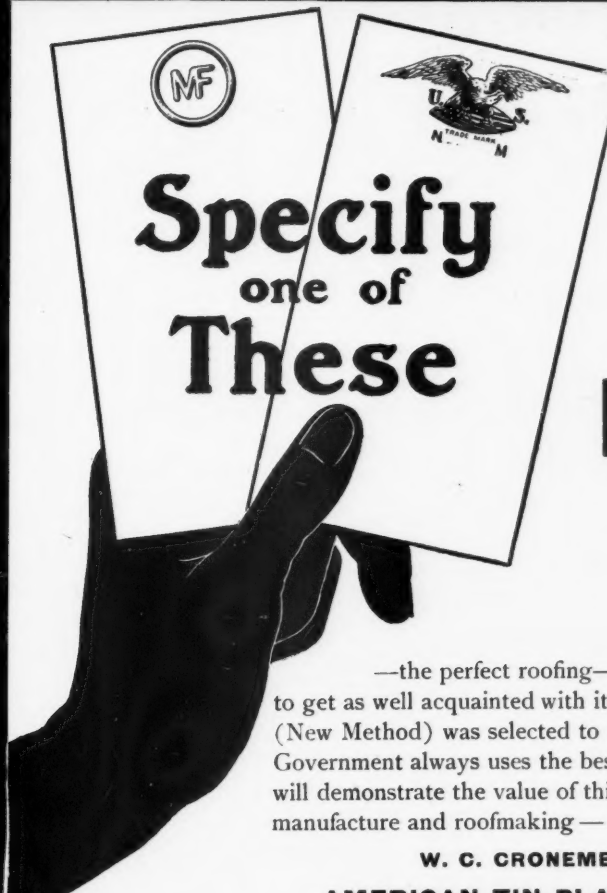
**MANITOWOC,
MILWAUKEE,
CHICAGO,**

where direct connections are made
for the East and South.

Nearest ticket agent can give you
complete information.

JAS. C. POND, Gen. Pass. Agent,
MILWAUKEE, WIS.

Please mention THE INLAND ARCHITECT when corresponding with Advertisers.



Dummler Bros.' stores, one of the best-known business blocks of Pittsburg, was covered with an **MF** roof in 1850, and that house has a waterproof top to-day, 53 years after. A block of residences in Boston was covered with **MF** 33 years ago, and they have never leaked. These are but two of thousands of like cases. It was such service that gave **MF** its name—**Most Favored**—and made it the standard of tin manufacture in America and Great Britain. We have made an improvement in these wonderful

MF Roofing Terne

that we call

U. S. Eagle N M

(NEW METHOD)

—the perfect roofing—and we want every architect, contractor, builder and roofer to get as well acquainted with it as they are with the famous **MF. U. S. Eagle NM** (New Method) was selected to cover the new Executive Offices of the White House—the Government always uses the best. We will send to any one in the trade a free sample that will demonstrate the value of this new product. "*A Fifty-Year Roof*"—a manual of terne manufacture and roofmaking—free, if you write to

W. C. CRONMEYER, Agt., Carnegie Building, Pittsburg, Pa.
AMERICAN TIN PLATE CO., Battery Park Building, NEW YORK.



Interlocking Rubber Tiling

As laid by us in The Reid Memorial Library, Passaic, N. J.

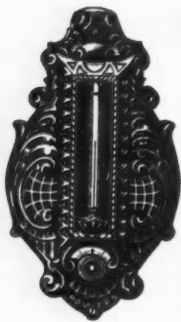
Waterproof, sanitary, non-slippery, soft, warm and comfortable to the feet, noiseless, capable of elegant designs and extraordinarily durable. Laid without disturbing old floor. A perfect floor for kitchens, laundries, pantries, halls, vestibules, offices, banking-rooms, court-rooms, schoolrooms, libraries, hospital-wards, cafes, billiard-rooms, piazzas, etc. Beware of infringers. Patented. Manufactured solely by us.

Call or write.

NEW YORK BELTING & PACKING CO., Ltd.

CHICAGO	150 Lake Street
NEW YORK	25 Park Place
PHILADELPHIA	724 Chestnut Street
BALTIMORE	Baltimore Rubber Co.
	41 South Liberty St.
BOSTON	232 Summer Street
INDIANAPOLIS, IND.	229 S. Meridian St.
ST. LOUIS	411 North 3d Street
SAN FRANCISCO	605-607 Mission St.
LONDON, ENG.	Arthur L. Gibson & Co.
	19 to 21 Tower Street, Upper
	St. Martin's Lane, W. C.

Please mention THE INLAND ARCHITECT when corresponding with Advertisers.



Avoid Extremes of Heat and Cold

—BY USING—

THE POWERS SYSTEM

—OF—

Temperature Regulation.

Applicable to all kinds of heating apparatus in Schools, Churches, Residences, Office Buildings, etc.

Successfully applied to the control of heat in RAILWAY CARS.

SEND FOR CATALOGUES.

The Powers Regulator Co., 40 Dearborn Street, Chicago.

111 Fifth Avenue, New York.

224 Franklin Street, Boston.



JENKINS BROTHERS' VALVES

Perfectly tight under all pressures of steam, oils or acids.

Warranted to give satisfaction under the worst conditions.

Received the Highest Award GOLD MEDAL at the Pan-American Exposition

Insist on having the genuine stamped with Trade-Mark.

JENKINS BROTHERS, NEW YORK, BOSTON, PHILADELPHIA, CHICAGO

POROUS FIREPROOFING

Illinois Terra Cotta Lumber Co.

Manufacturers and Contractors for the Fireproofing of Buildings

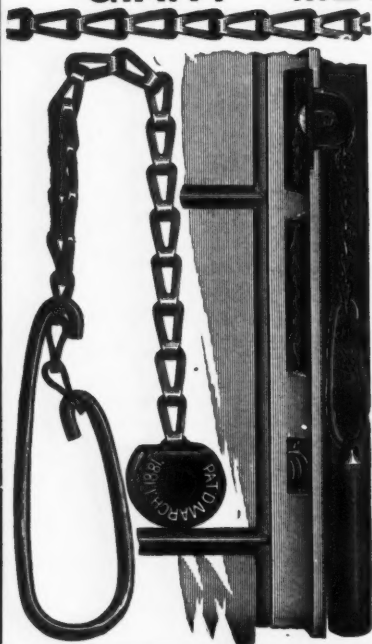
OFFICE

439 "The Rookery," CHICAGO

Telephone, HARRISON 1705

WORKS AT PULLMAN

"GIANT" METAL SASH CHAIN



Has not been equaled in quality in 20 years. Durability guaranteed. The bronze costs 40 per cent more than any other Sash Chain metal.

Full line of Sash and Cable Chains, Sash Pulleys and Fixtures.

MANUFACTURED BY

THE SMITH & EGGE
MFG. CO.

BRIDGEPORT, CONN.

WRITE FOR OUR LATEST
CATALOGUE.

FLORIDA?

Yes, I'm going.

Well, there's *something new* for you to consider.

THE SOUTHERN RAILWAY

—in connection with the—

Queen & Crescent Route

will take you *down one way and bring you back another*, for a slight advance in the regular winter tourist rate.

Low round-trip rates now in effect to all tourist points in Florida and the South.

Good connections, through sleepers, fine equipment, best of everything.

On January 11, 1904, the "Chicago & Florida Special" and the "Florida Limited," with through Pullman sleepers, dining, club and observation cars, will again go into service, Chicago to St. Augustine, via Cincinnati, Chattanooga, Atlanta and Jacksonville.

For through sleeping car reservations, literature and full particulars, write

J. S. McCULLOUGH,

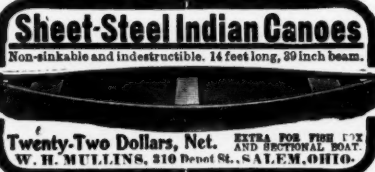
N. W. P. A.,

225 Dearborn St.,

CHICAGO, ILL.

Phone Harrison, 1813.

G. B. ALLEN, G. P. A., St. Louis, Mo.



THE ALTON'S ENGINEER.

IF YOU WILL SEND THE ADDRESS OF A PERSON WHO, WITHIN A YEAR, WILL HAVE USE FOR THE CHICAGO & ALTON RAILWAY



(TERRITORY COVERED OUTLINED IN ABOVE MAP). WE WILL MAIL TO YOU A PICTURE, 4 1/4 X 3 INCHES, OF THE ALTON'S ENGINEER. IF, IN ADDITION, YOU WILL TELL US IN WHAT PUBLICATION YOU READ THIS ADVERTISEMENT, WE WILL SEND TO YOU A PAMPHLET ABOUT THE BIGGEST CAMERA IN THE WORLD.

GEO. J. CHARLTON,

GENERAL PASSENGER AGENT, CHICAGO & ALTON RAILWAY,
CHICAGO, ILLINOIS.

Please mention THE INLAND ARCHITECT when corresponding with Advertisers.

INDEX TO ADVERTISEMENTS.

	Page		Page		Page		Page
Architectural Drawing.		Electric Plants.		Monuments.		Shingle Stain.	
Deane, E. Eldon	XV	Westinghouse, Church, Kerr & Co.	IV	Mortar Colors.		Berry Bros.	VIII
Architectural Iron Works.		The Westinghouse Machine Co.	IV	French, S. H., & Co.	VI	Cabot, Samuel	XII
The Winslow Bros. Co.	II	Elevators.		Moldings, Mirrors, Frames.		Dexter Bros.	XV
Brown Bros. Mfg. Co.	V	Link Belt Machinery Co.	XII	W. W. Abbott	IX	Sidewalk and Vault Lights.	
American Sidewalk Light Co.	IX	The J. W. Reedy Elevator Co.	XIII	Paints, Oils and Varnishes.		Brown Bros. Mfg. Co.	V
Architectural Photographers.		Elevator Supplies.		Berry Bros.	VIII	American Sidewalk Light Co.	IX
Taylor, J. W.	II	Engineers.		Joseph Dixon Crucible Co.	X	Skylights (Metal).	
Architectural Views.		Westinghouse, Church, Kerr & Co.	IV	New Jersey Zinc Co.	X	Snow Guards.	
Taylor, J. W.	II	The Westinghouse Machine Co.	IV	Pitkin, Geo. W., Co.	II	Folsom Snow Guard Co.	IX
Boats.		Fireproof Doors.		Smith, Edward, & Co.	XVI	Spring Hinges.	
W. H. Mullins	X	Kinnear Mfg. Co.	X	Thomson Wood Finishing Co.	V	Smith & Egge Mfg. Co.	VIII
Boiler Covering.		Fireproof Shutters.		Pencils.		Stained and Decorative Glass.	
The Keasbey & Mattison Co.	XII	Kinnear Mfg. Co.	X	Joseph Dixon Crucible Co.	VI	Louis J. Millet	XIV
Bricks (Pressed).		Fire Extinguisher.		Plumbers' Fittings.		Steam Engines.	
Chicago Hydraulic Press Brick Co.	IX	Fireproofing.		Standard Sanitary Mfg. Co.	V	Westinghouse, Church, Kerr & Co.	IV
Pindlay Hydraulic Press Brick Co.	IX	Associated Expanded Metal Co.'s.	VI	Printers.		The Westinghouse Machine Co.	IV
Illinois Hydraulic Press Brick Co.	IX	National Fireproofing Co.	XIV	The H. O. Shepard Co.	VII	Steam Fittings.	
Kansas City Hydraulic Press Brick Co.	IX	Pioneer Fireproofing Co.	XIV	Railroads.		Steam Loops.	
Menominee Hydraulic Press Brick Co.	IX	The Roebbling Construction Co.	XII	Baltimore & Ohio R. R.	XIII	Westinghouse, Church, Kerr & Co.	IV
Omaha Hydraulic Press Brick Co.	IX	Floor Polish.		Big Four Route	XIII	The Westinghouse Machine Co.	IV
St. Louis Hydraulic Press Brick Co.	IX	Butcher Polish Co.	X	Chicago & Alton	VIII, X	Steel Rolling Doors.	
Brick (Enameled).		Gas Engines.		Chicago & North-Western R'y	X	Kinnear Mfg. Co.	X
Hydraulic Press Brick Co.	IX	Westinghouse, Church, Kerr & Co.	IV	Chicago, Milwaukee & St. Paul	XIV	Steel Rolling Shutters.	
Brick (Ornamental).		The Westinghouse Machine Co.	IV	Delaware, Lackawanna & Western	IV	Kinnear Mfg. Co.	X
Chicago Hydraulic Press Brick Co.	IX	Grilles.		Denver & Rio Grande R. R.	IX	Steel Shutters.	
Pindlay Hydraulic Press Brick Co.	IX	Hardware.		Grand Trunk Lines	XV	American Sidewalk Light Co.	IX
Hydraulic Press Brick Co.	IX	The Yale & Towne Mfg. Co.	XVI	Illinois Central	XVI	Kinnear Mfg. Co.	X
Illinois Hydraulic Press Brick Co.	IX	Heating.		Monon and C. H. & D. Route	VIII	Stokers.	
Kansas City Hydraulic Press Brick Co.	IX	B. F. Sturtevant Co.	III	Michigan Central R. R.	X	Westinghouse, Church, Kerr & Co.	IV
Menominee Hydraulic Press Brick Co.	IX	Heating and Ventilating Apparatus.		Missouri Pacific R'y	VIII	The Westinghouse Machine Co.	IV
Omaha Hydraulic Press Brick Co.	IX	Pierce, Butler & Pierce.	XVI	New York Central R. R.	XI	Temperature Regulator.	
Builders' Hardware.		B. F. Sturtevant Co.	III	Northern Pacific R. R.	X	The Powers Regulator Co.	VIII
Orr & Lockett	XVI	Kellogg-Mackay-Cameron Co.	XI	Queen & Crescent Route.	XI	Terra Cotta.	
The Yale & Towne Mfg. Co.	XVI	Hollow Block.		Rio Grande & Western	VI	Northwestern Terra-Cotta Works	II
Builders' Sundries.		National Fireproofing Co.	36	Southern R'y	VIII	Winkle Terra Cotta Co.	IV
The Yale & Towne Mfg. Co.	XVI	Ice and Refrigerating Machinery.		Southern Pacific Co.	XI	Tile (Rubber).	
Building Papers.		Westinghouse, Church, Kerr & Co.	IV	Santa Fe Route	X	New York Belting & Packing Co., Ltd.	VII
Cabot, Samuel	XII	The Westinghouse Machine Co.	IV	Wisconsin Central	VI	Trees.	
Cements.		Interior Finish.		Reflectors.		Peterson Nursery	II
French, S. H., & Co.	VI	Locks.		Frink, I. P.	VI	Valves (Steam).	
Clothes Dryers.		The Yale & Towne Mfg. Co.	XVI	Roofing Tile.		Jenkins Bros.	VIII
Conduit.		Mail Chutes.		National Tile Roofing Co.	II	Varnish.	
National Fireproofing Co.	36	Cutler Manufacturing Co.	XIII	Roofing Tin.		Ventilation.	
Cordage.		Mechanical Stokers.		American Tin Plate Co.	VII	Wall Papers.	
Samson Cordage Works	XVI	Westinghouse, Church, Kerr & Co.	IV	N. & G. Taylor Co.	III	Window Lines	
Creosote Stains.		The Westinghouse Machine Co.	IV	Rolling Doors and Shutters (steel).		Samson Cordage Works	XVI
Cabot, Samuel	XII	Metal Ceilings.		Kinnear Mfg Co.	X	Wood Floors.	
Drawing Material and Implements.		Berger Mfg. Co.	VI	Rubber Tiling.		Moore, H. B., & Co.	VI
Abbott, A. H., & Co.	XII	Metallic Fixtures and Furniture.		New York Belting and Packing Co.	VII	National Wood Floor Co.	XIII
				Sanitary Appliances.			
				Cudell, F. B.	IX		
				Standard Sanitary Mfg. Co.	V		
				Sash Cords and Chains.			
				Smith & Egge Mfg. Co.	VIII		
				Samson Cordage Works	XVI		
				Sash Locks.			
				Sheathing and Dendening Quilt.	XII		
				Cabot, Samuel			

GRAND TRUNK RAILWAY SYSTEM

SOLID THROUGH TRAINS

BETWEEN

CHICAGO, BUFFALO, NEW YORK AND PHILADELPHIA

"VIA NIAGARA FALLS."

Also to BOSTON via the important business centers of CANADA and NEW ENGLAND.

For Information, Time Tables, etc., apply to any Agent of the Company, or to

GEO. W. VAUX,
ASST. GEN. PASS. & TKT. AGT.,
135 ADAMS ST.,
CHICAGO.

Folsom New Model Snow Guard



Specified by leading architects to hold the snow on all pitch roofs, entirely obviating all chance of injury to life or to the property it protects. The only perfect device for this purpose. It is made in various forms for old and new roofs of slate, shingle, tile or metal. Full information on application.

THREE HISTORIC BUILDINGS.

Faneuil Hall,
Old South Church,
King's Chapel,
Boston,

Are Fitted with this Snow Guard.

FOLSOM SNOW GUARD CO.

ROSLINDALE (BOSTON), MASS.

Please mention THE INLAND ARCHITECT when corresponding with Advertisers.

KINNEAR
STEEL ROLLING
DOORS SHUTTERS
SEND FOR CATALOGUE 'K'
THE KINNEAR MFG. CO. COLUMBUS OHIO, U.S.A.

BOSTON - 85 WATER ST.
NEW YORK - 45 VESEY ST.
CHICAGO - 112 CLARK ST.
PHILADELPHIA -
1011 CHESTNUT ST.



BUTCHER'S BOSTON POLISH

Is the best finish made for FLOORS, INTERIOR WOODWORK AND FURNITURE.
Not brittle; will neither scratch nor deface like shellac or varnish. Is not soft and sticky like beeswax. Perfectly transparent, preserving the natural color and beauty of the wood. Without doubt the most economical and satisfactory POLISH known for HARDWOOD FLOORS. Specially valuable for the use of HOTELS.

For sale by dealers in Paints and Hardware.
Send for our FREE BOOKLET telling of the many advantages of BUTCHER'S BOSTON POLISH.
THE BUTCHER POLISH CO., 356 Atlantic Avenue, BOSTON, MASS.

COLORS AND SPECIFICATIONS

(ILLUSTRATED)
PROTECTIVE PAINT FOR CONSTRUCTION AND MAINTENANCE OF STEEL AND IRON WORK.

PUBLISHED FOR FREE DISTRIBUTION BY THE
Joseph Dixon Crucible Co., Jersey City, U.S.A.

Pyramid nor Colosseum

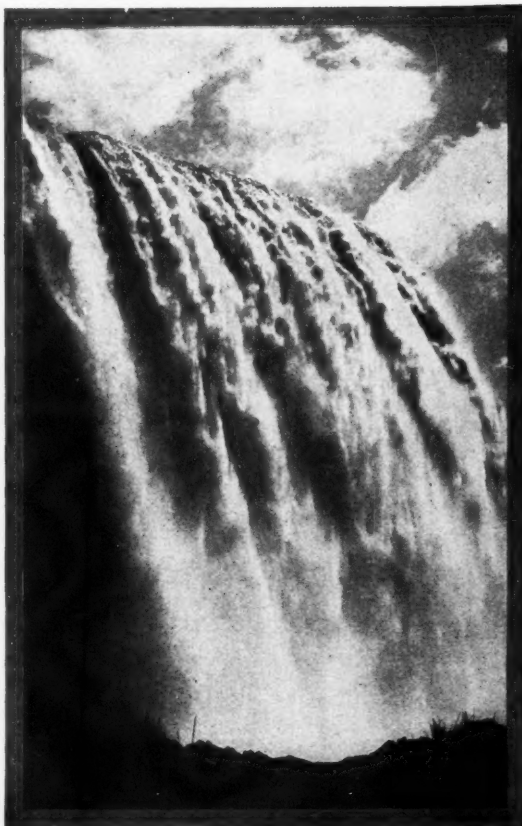
Nor any work of man can approach in majesty

Niagara Falls

It is the grandest sight on earth

The Michigan Central

"The Niagara Falls Route" is the only line passing directly by and in full view of the entire panorama of the Falls. Remember this when you go east.



Send three red stamps for Niagara book and ask about the new Niagara art picture.

O. W. RUGGLES, G. P. & T. A., Chicago

Chalking Paint

Profits nobody but the paint maker. It certainly reflects no credit on the architect.

There is only one kind of white paint that never chinks; that moreover is durable as a protective coating and permanent as a decorative feature

--Zinc White

FREE

Our Practical Pamphlets:

- "The Paint Question"
- "Paints in Architecture"
- "Specifications for Architects"
- "French Government Decrees"

The
New Jersey Zinc Co.
71 Broadway, New York

We do not grind zinc in oil. List of manufacturers of zinc white paints will be furnished on request.

Your Best Buildings

Reproduced exactly from Photographs by our

HALF-TONE PROCESS

and issued in book or pamphlet form would constitute an attractive Souvenir, and a pleasant introduction to Prospective Clients . . .

We will make half-tone plates (our best work) at LOWER PRICES than you can get elsewhere—probably 30 to 40 per cent less.

Send for prices, stating sizes and number of plates wanted.

INLAND PUBLISHING CO.

610 Manhattan Building, - - - - CHICAGO.

Please mention THE INLAND ARCHITECT when corresponding with Advertisers.

"And the wilderness shall blossom as the rose."

SOUTHERN CALIFORNIA

Is a remarkable illustration of the above prophecy, and persons who have not seen it for a few years will be astonished at its wonderful growth. It is best reached by the

NEW YORK CENTRAL LINES,

and their intermediate connections.

Any ticket agent of the New York Central, Boston & Albany, Lake Shore, Michigan Central, Big Four, or Pittsburg & Lake Erie Railroads will tell you about it.

A copy of No. 5 of the "Four-Track Series," "America's Winter Resorts," will be sent free, to any address, on receipt of a two-cent stamp, by George H. Daniels, General Passenger Agent, New York Central & Hudson River Railroad, Grand Central Station, New York.

Successful Boilers AND RADIATORS



ONE OF 36 STYLES

Our Catalogue, "The Boiler Magazine," sent on request, is the best ever

Kellogg-Mackay-Cameron Co.

CHICAGO

MINNEAPOLIS

KANSAS CITY

SEATTLE, WASH.

FLORIDA

SHORT LINE

QUEEN & CRESCENT ROUTE

AND
SOUTHERN RAILWAY

Chicago and Florida Special

On and after January 11, 1904
Solid Pullman Train from Cincinnati
Through Pullman Service from Chicago,
Cleveland, Detroit, Louisville to Jackson-
ville and Saint Augustine.

Florida Limited

Solid Train, Cincinnati to Jacksonville
and St. Augustine, with through Pullman
service from Chicago.

Also Pullman Service between
Cincinnati, Asheville, Savannah,
Charleston, Atlanta, Birmingham,
New Orleans and Texas Points.

Dining and Observation Cars
on all Through Trains.

Write for rates and information
W. A. Garrett, G. M.
W. C. Rinearson, G. P. A.
Cincinnati

SHORT LINE

NEW ORLEANS

CALIFORNIA

IS

A LAND OF REFUGE

FROM

Winter Blizzards

HER

MOUNTAIN PLATEAUS

GLACIAL LAKES

GIANT FORESTS

SEASIDE CITIES

OFFER

AN IDEAL CLIMATE

WITH THE

BEST HOTEL ACCOMMODATIONS

WRITE

W. G. NEIMYER, General Agent

SOUTHERN PACIFIC

193 Clark Street

CHICAGO

FOR CALIFORNIA FOLDERS

Please mention THE INLAND ARCHITECT when corresponding with Advertisers.



HOPPIN & KOEN, ARCHITECTS, NEW YORK

Cabot's Shingle Stains ..

MADE OF THE BEST
PIGMENTS, PURE
LINSEED OIL AND
CREOSOTE, THE
BEST WOOD PRE-
SERVATIVE KNOWN

The Standard Stains for over twenty years
Samples sent on request

Samuel Cabot

Sole Manufacturer

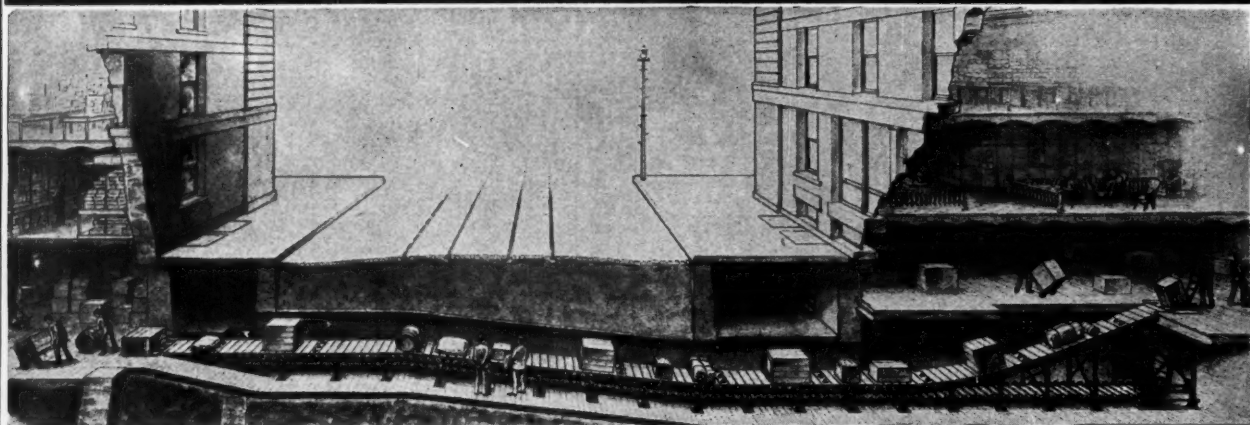
28 Dearborn Avenue
CHICAGO

70 Kilby Street
BOSTON

MODERN

LINK-BELT

METHODS



MISCELLANEOUS FREIGHT CARRIER RECENTLY INSTALLED FOR BUTLER BROS., CHICAGO

WE DESIGN AND INSTALL
APPROVED

LABOR SAVING APPLIANCES

FOR HANDLING ANY MATERIAL
IN BULK OR PACKAGE

LINK-BELT ENGINEERING CO., PHILADELPHIA

LINK-BELT MACHINERY CO., CHICAGO

Officially Approved and Adopted throughout the Civilized
World as the Standard.

KEASBEY & MATTISON'S

85 Per Cent

Sectional Magnesia Coverings

85 per cent Magnesia Coverings are the highest
priced coverings sold, but the cheapest to buy if you have
to pay the coal bill yourself.

BUY THE GENUINE

There are frauds and imitations being offered

85 Per Cent Sectional Magnesia Coverings

MANUFACTURED BY THE

Keasbey & Mattison Company

AMBLER, PENN.

Branches in all the principal Cities
All infringers will be held liable in heavy damages



A. H. ABBOTT & CO.

Drawing Supplies,

Instruments, Tracing Cloth, Papers, Colors
Scales, Levels, Transits, Etc.

BLUE-PRINTS.

50 Madison Street, CHICAGO.

The Roebling System of Fire-Proof Construction.

HIGHEST EFFICIENCY IN THE FIRE AND WATER
TESTS OF THE NEW YORK BUILDING DEPART-
MENT, AND NOW THE RECOGNIZED STANDARD
OF FIRE-PROOF CONSTRUCTION.

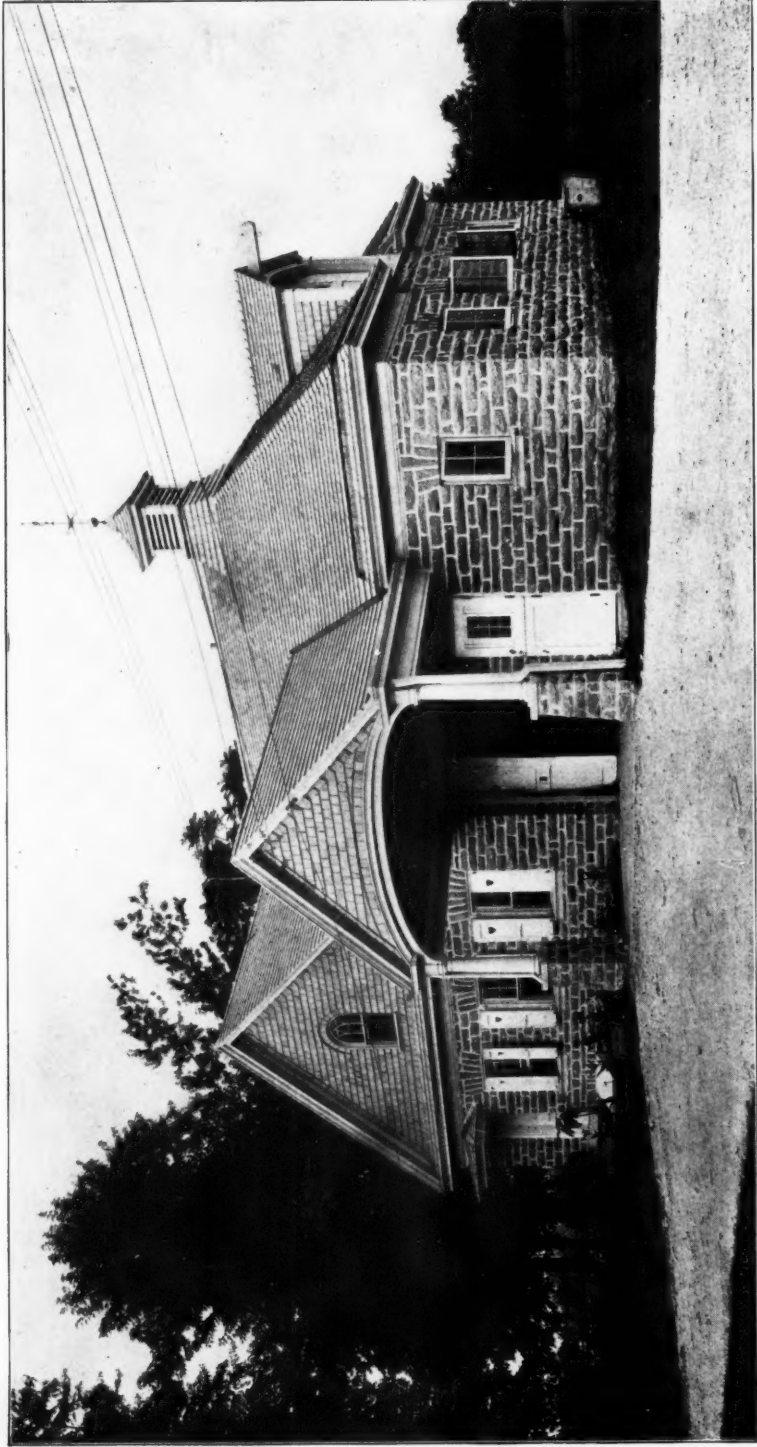
THE ROEBLING CONSTRUCTION CO.,

121 Liberty Street,
NEW YORK CITY.

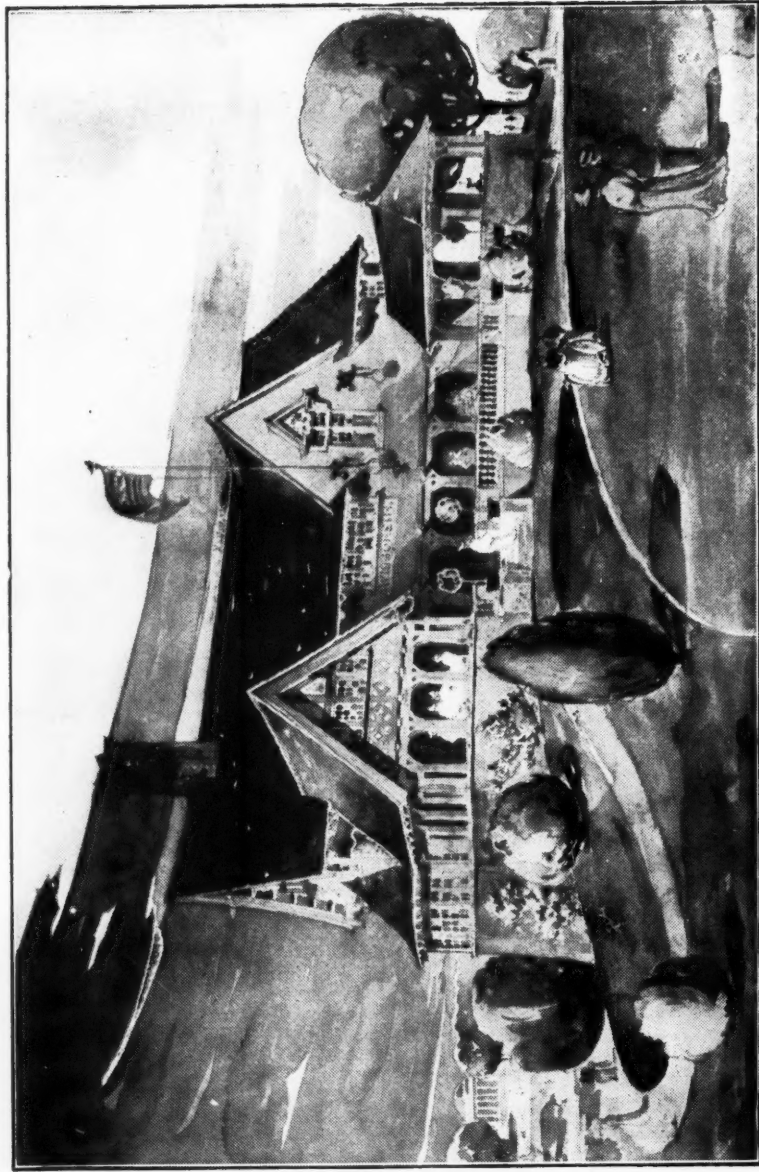
171 Lake Street,
CHICAGO, ILL.

SEND FOR CATALOGUE.

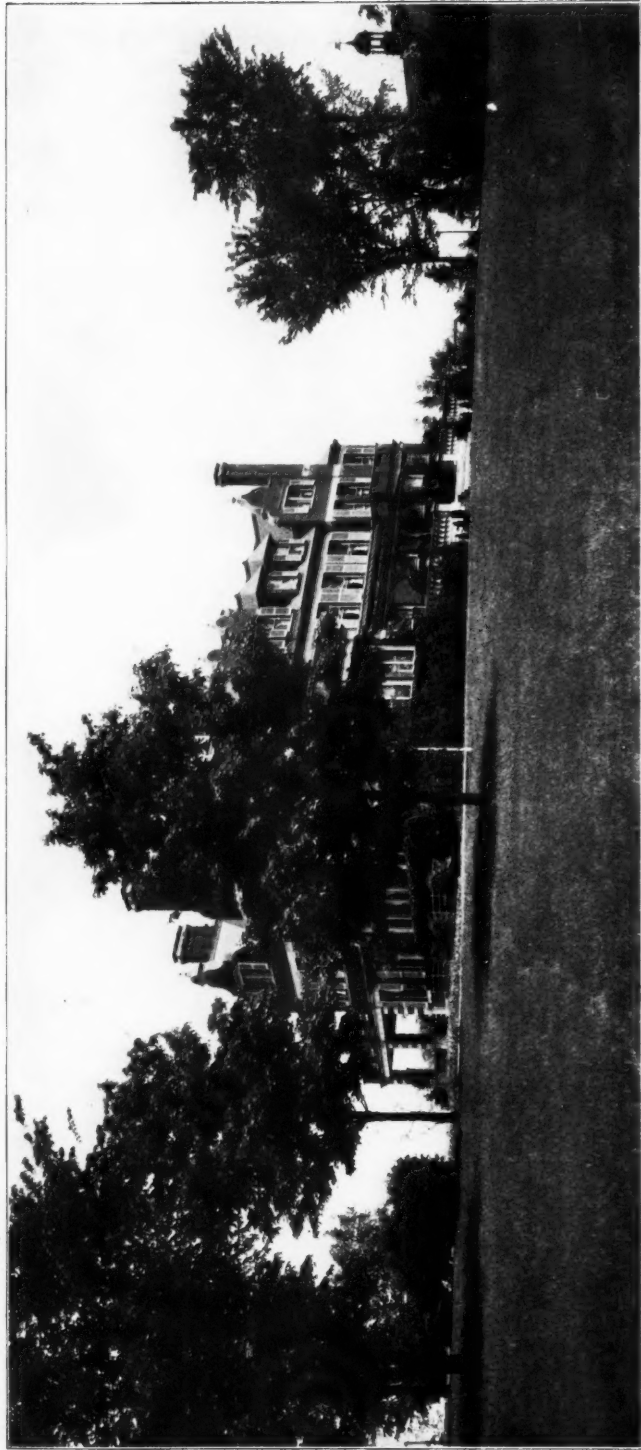
Please mention THE INLAND ARCHITECT when corresponding with Advertisers.



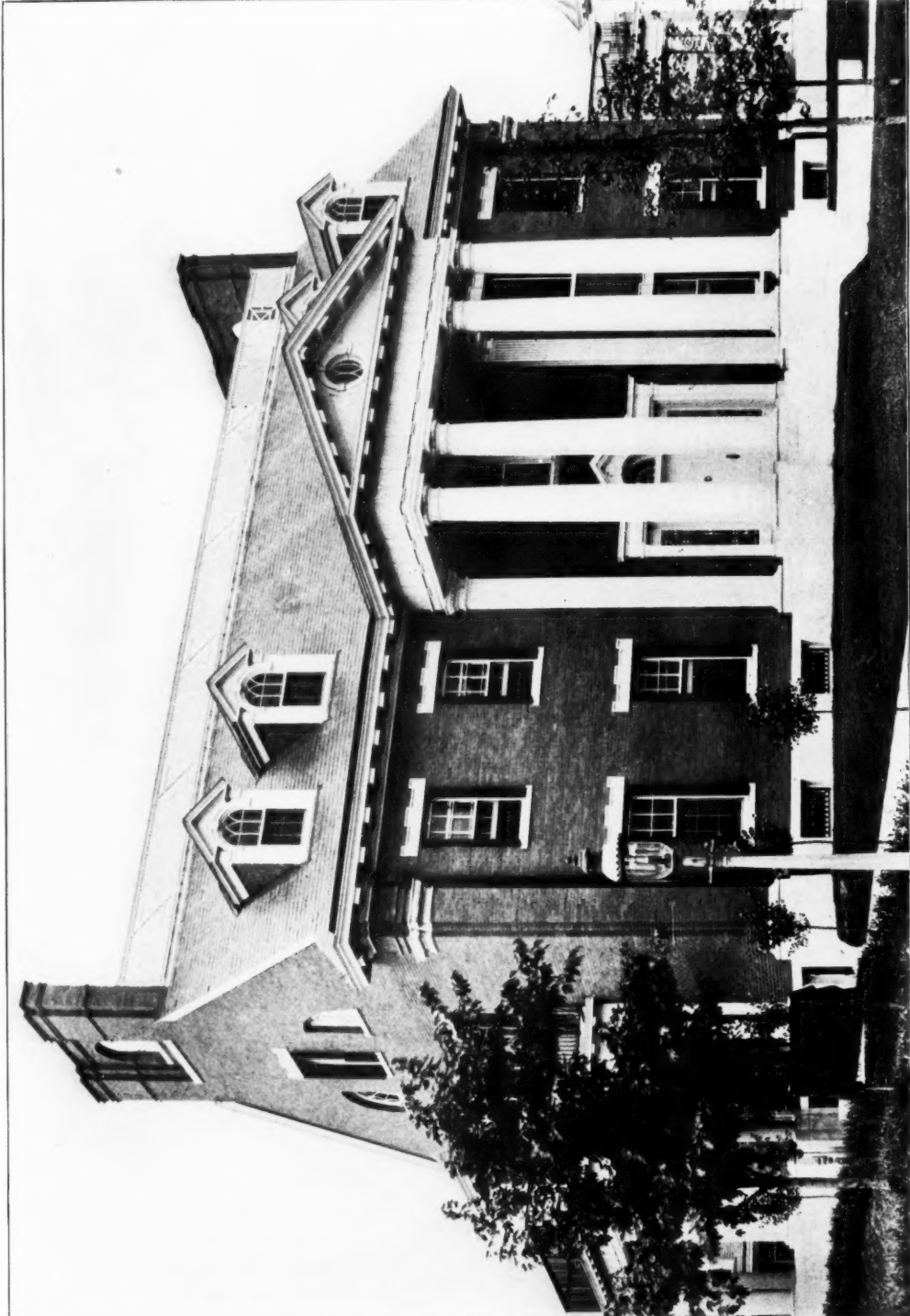
STABLE FOR JONATHAN SELTZER, MERION, PENNSYLVANIA.
CHESTER KIRK, ARCHITECT.



WISCONSIN BUILDING, WORLD'S FAIR, ST. LOUIS, 1904.



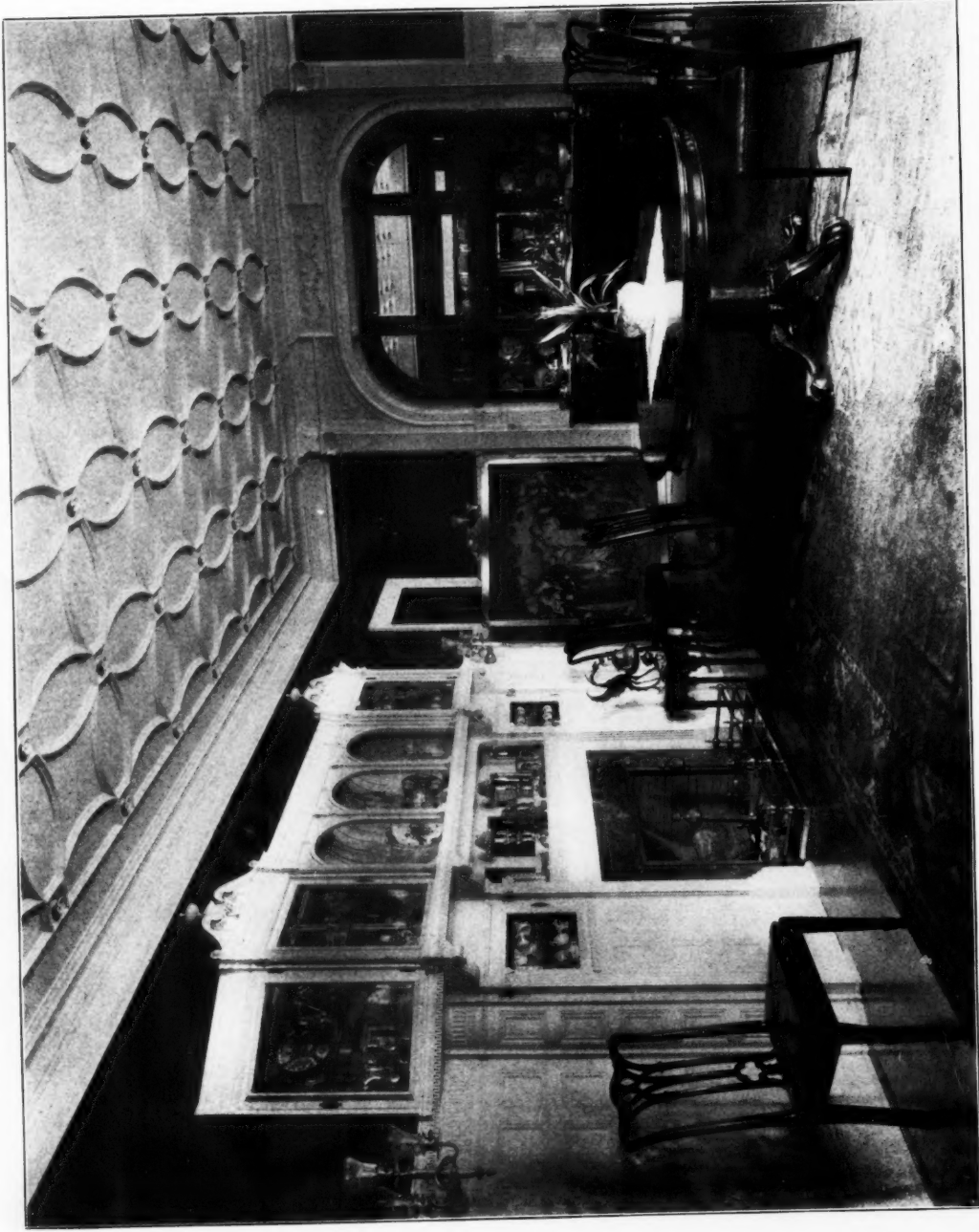
SOUTHWEST VIEW, RESIDENCE OF A. R. MEYER, KANSAS CITY, MISSOURI.
VAN BRUNT & HOWE, ARCHITECTS.



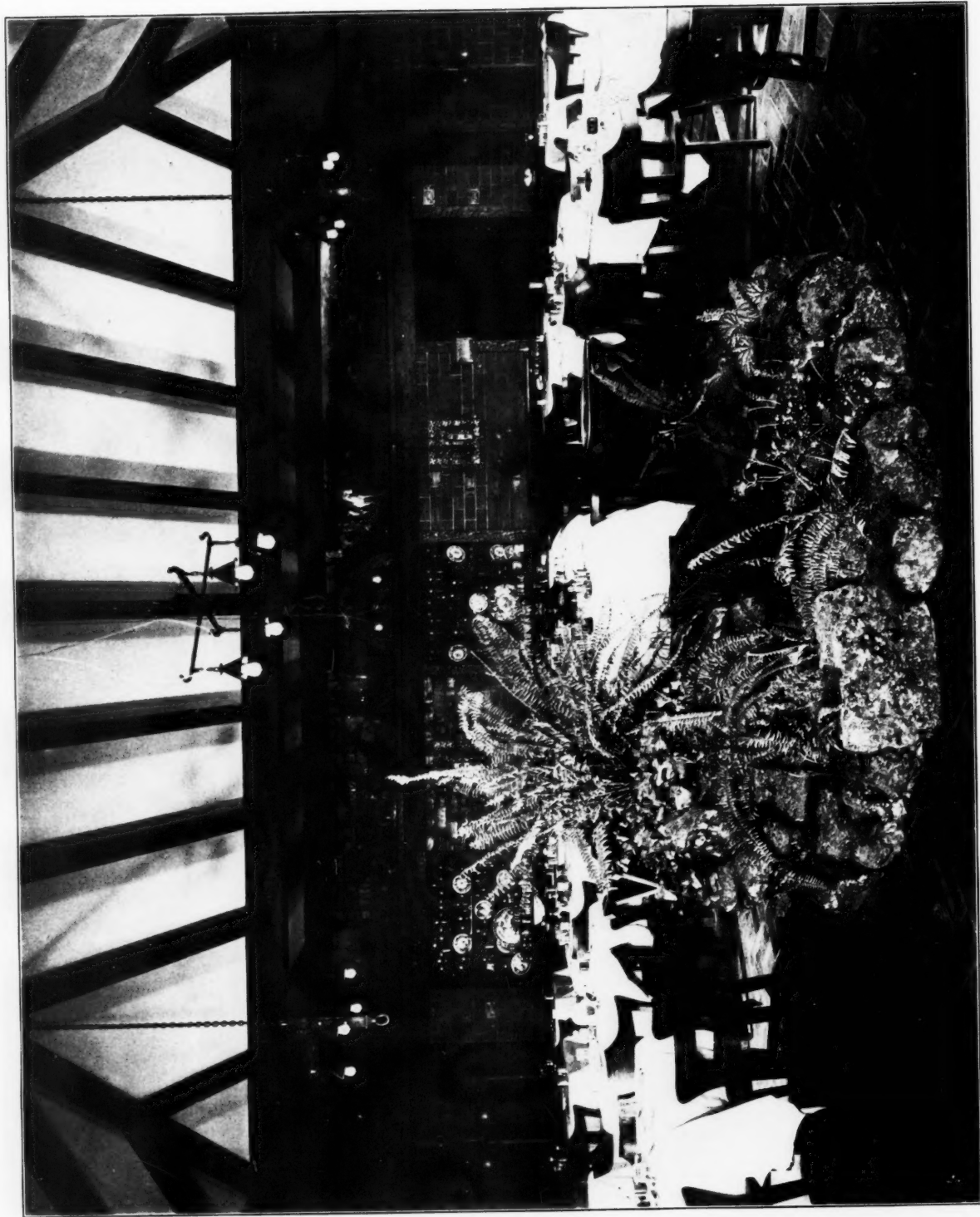
RESIDENCE OF FRANK N. JOHNSON, ST. LOUIS, MISSOURI.

WEBER & GROVES, ARCHITECTS.





VIEW IN DINING-ROOM, RESIDENCE OF A. R. MEYER, KANSAS CITY, MISSOURI.
VAN BRUNT & HOWE, ARCHITECTS.

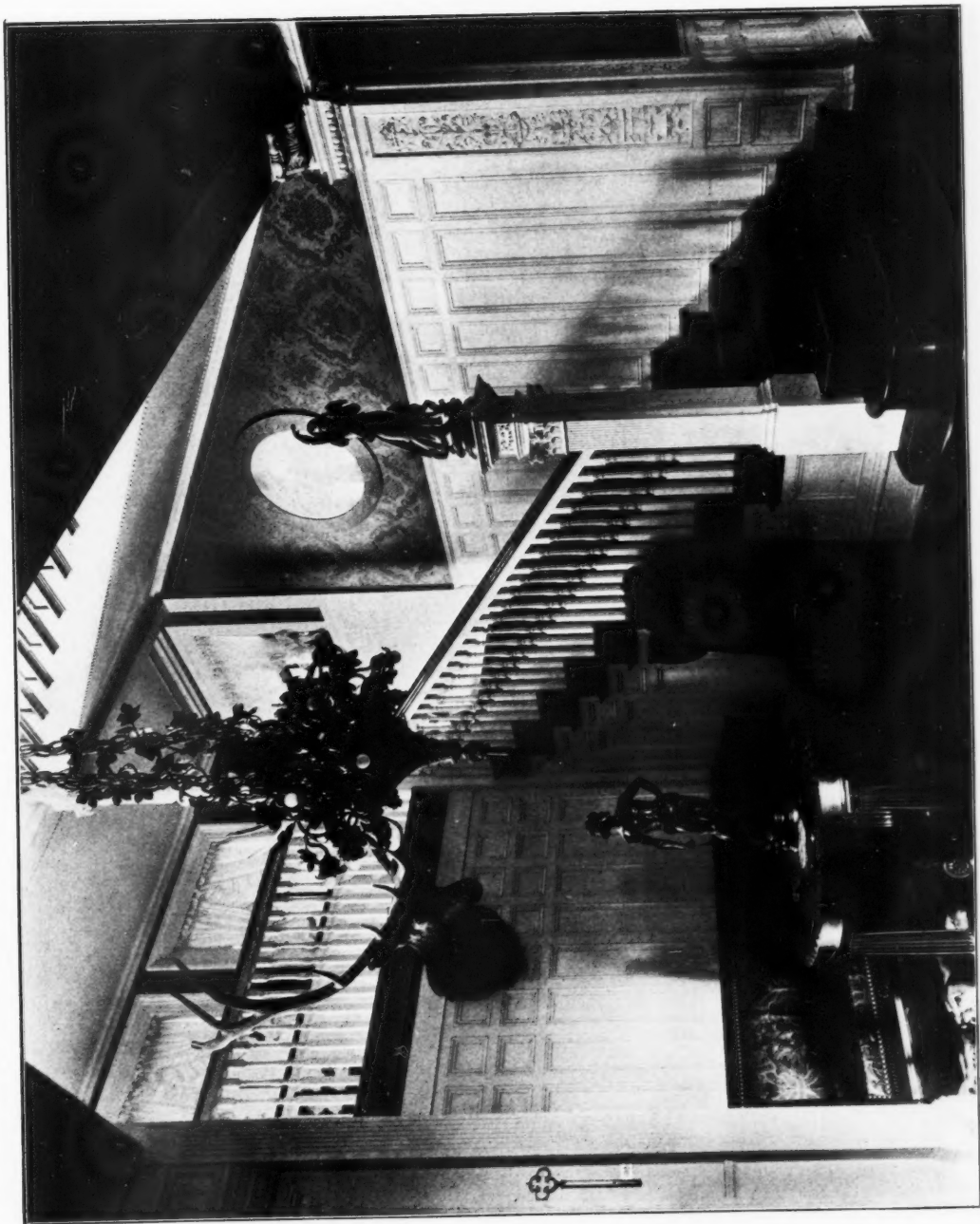


SILVER GRILL ROOM, HOTEL SPOKANE, SPOKANE, WASHINGTON.
CUTTER & MALMGREN, ARCHITECTS.

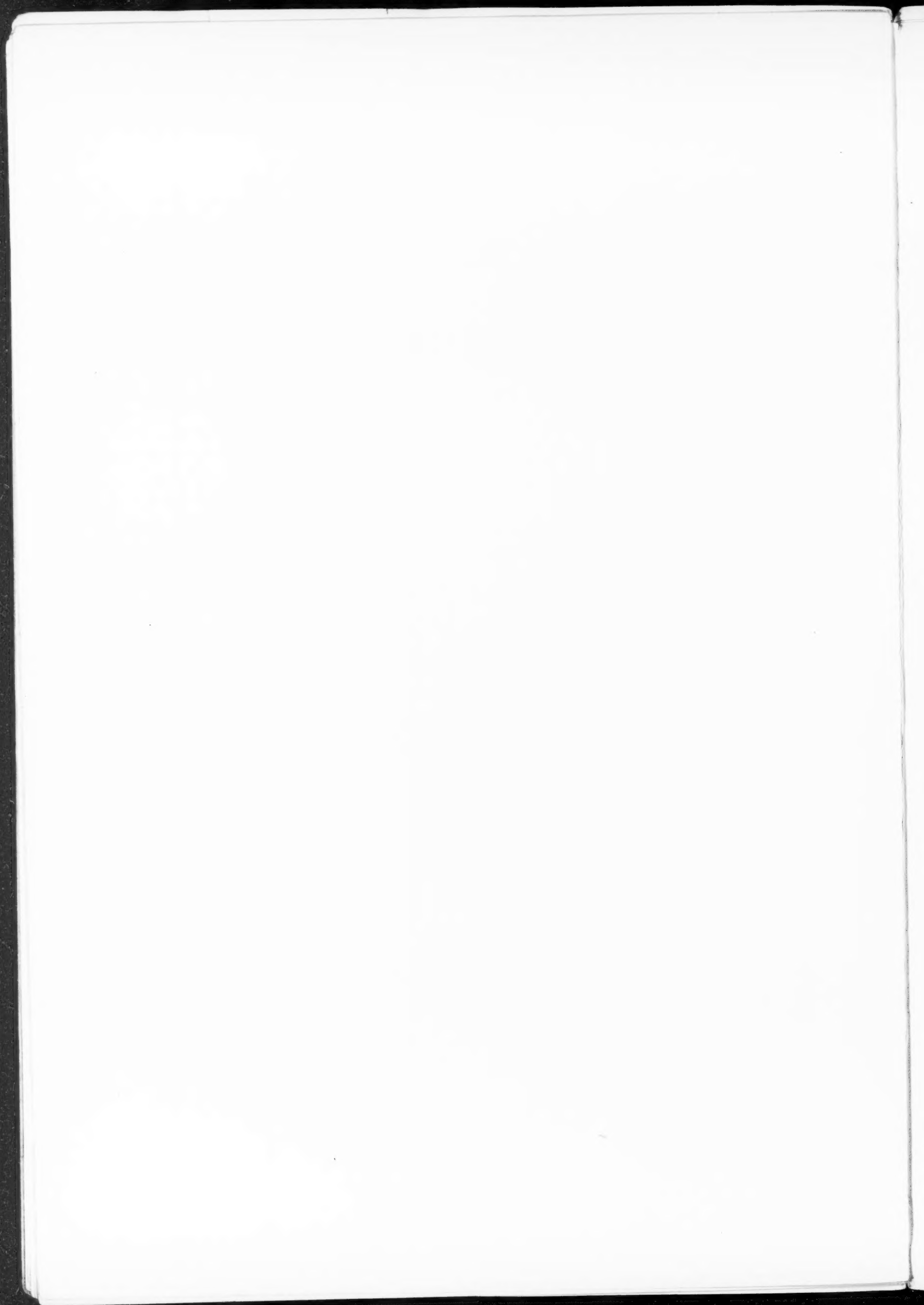


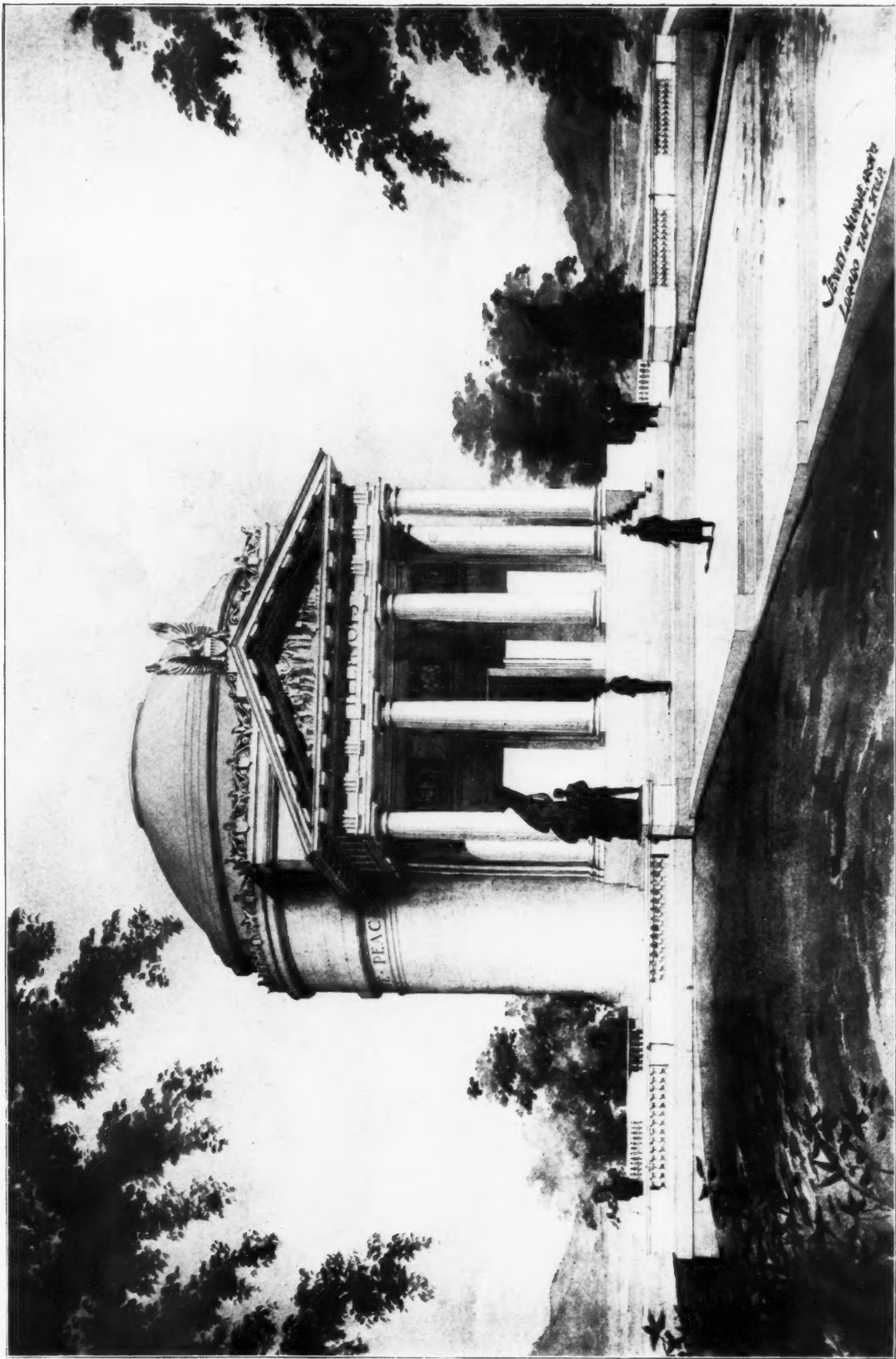
MAIN DINING-ROOM, DAVENPORT RESTAURANT, SPOKANE, WASHINGTON
CUTTER & MALMGREN, ARCHITECTS.



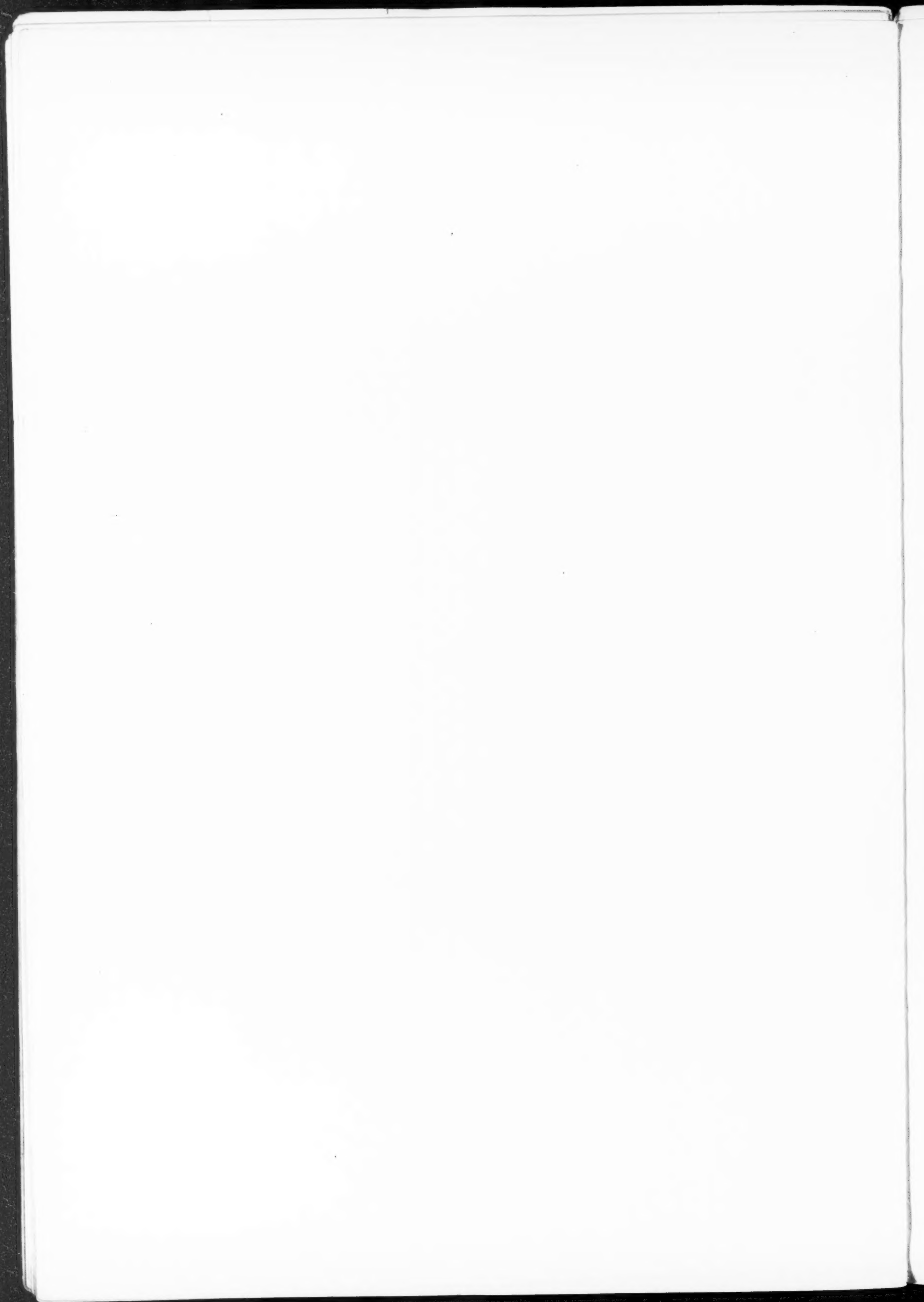


VIEW IN HALL, RESIDENCE OF A. R. MEYER, KANSAS CITY, MISSOURI.
VAN BRUNT & HOWE, ARCHITECTS.





DESIGN OF MONUMENT COMMEMORATING ILLINOIS IN THE VICKSBURG CAMPAIGN OF 1863, NATIONAL
MILITARY PARK, VICKSBURG, MISSISSIPPI.
JENNEY & MUNDIE, ARCHITECTS; LORADIO TAFT, SCULPTOR.





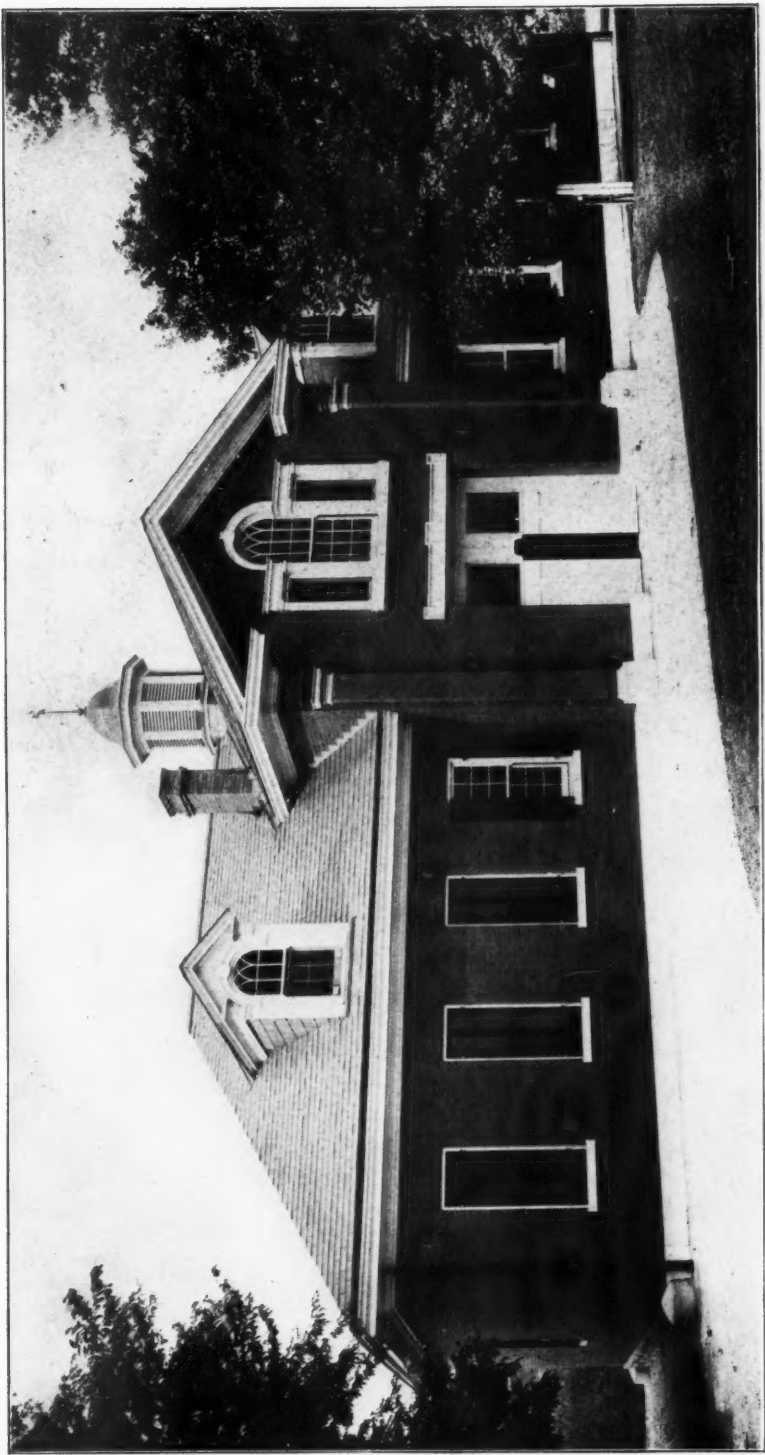
NORTHWEST VIEW, RESIDENCE OF A. R. MEYER, KANSAS CITY, MISSOURI.
VAN BRUNT & HOWE, ARCHITECTS.





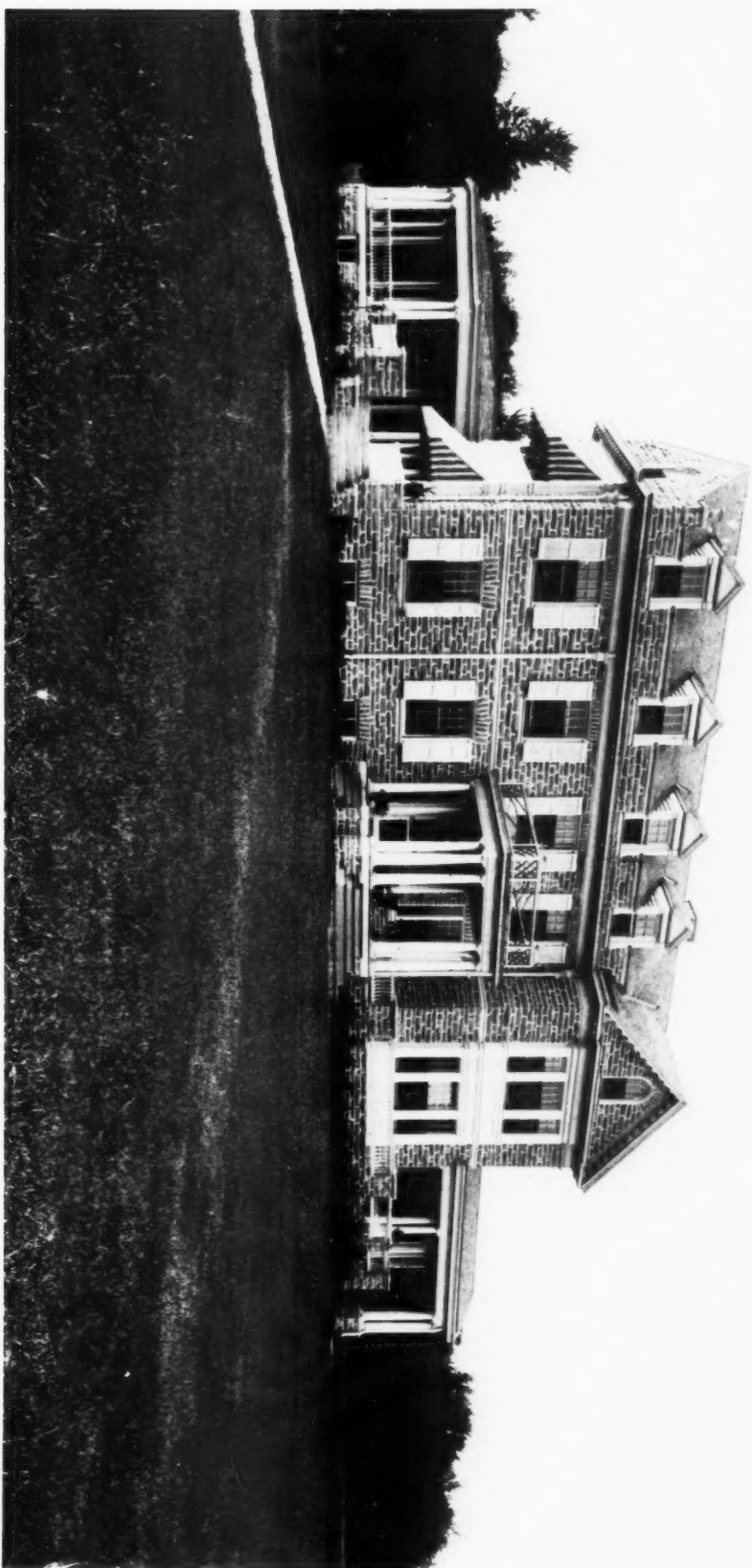
LIBERAL ARTS BUILDING, WORLD'S FAIR, ST. LOUIS, 1904.

BARNETT, HAYNES & BARNETT, ARCHITECTS.



STABLE FOR FRANK N. JOHNSON, ST. LOUIS, MISSOURI.

WEBER & GROVES, ARCHITECTS.



RESIDENCE OF JONATHAN SELTZER, MERION, PA.
CHESTER A. KIRK, ARCHITECT, PHILADELPHIA.

INLAND ARCHITECT PRESS

THE INLAND ARCHITECT AND NEWS RECORD

Vol. XLIII.

FEBRUARY, 1904.

No. 1



A Monthly Journal Devoted to
ARCHITECTURE,
CONSTRUCTION, DECORATION AND FURNISHING
IN THE WEST.

PUBLISHED BY THE INLAND PUBLISHING CO.,
602-603 STAR BUILDING, CHICAGO, ILL.

L. MULLER, Jr., Manager. **ROBERT CRAIK McLEAN, Editor.**

SPECIAL CONTRIBUTORS:

C. HOWARD WALKER.	D. H. BURNHAM.	W. L. B. JENNEY.
HENRY VAN BRUNT.	P. B. WIGHT.	IRVING K. POND.
LOUIS H. SULLIVAN.	ALLEN B. POND.	J. R. WILLETT.
WILLIAM S. MACHARG.	C. E. ILLSLEY.	F. W. FITZPATRICK.

TERMS: Regular number, \$5 a year; Photogravure edition, \$10 a year. Single copies, Regular number, 50c.; Photogravure edition (including 7 photogravures), \$1. Advance payment required.

The columns and illustration pages of **THE INLAND ARCHITECT** are open to all alike, merit and availability only determining what shall be published. Contributions appropriate to its pages are always desired.

AMERICAN INSTITUTE OF ARCHITECTS.

OFFICERS FOR 1904:

PRESIDENT	*W. S. EAMES, St. Louis, Mo.
FIRST VICE-PRESIDENT	F. M. DAY, Philadelphia, Pa.
SECOND VICE-PRESIDENT	WM. A. BORING, New York.
SECRETARY AND TREASURER	*GLENN BROWN, Washington, D. C.
AUDITOR FOR TWO YEARS	JOS. C. HORNBLLOWER, Washington, D. C.
AUDITOR FOR ONE YEAR	JAMES G. HILL, Washington, D. C.

* Executive Committee.

BOARD OF DIRECTORS FOR 1904.

For Three Years.—Charles F. McKim, New York; Geo. B. Post, New York; R. D. Andrews, Boston, Mass.

For Two Years.—Robert S. Peabody, Boston, Mass.; W. B. Mundie, Chicago; Isaac E. Ditmars, New York.

For One Year.—Walter Cook, New York; Cass Gilbert, New York; †W. S. Eames, St. Louis, Mo.

† A successor to W. S. Eames, on Board of Directors, will be elected and standing committees appointed at the next meeting of the Board, in January, 1904.

As we go to press, the news of the great conflagration at Baltimore is received. The structural aspects of the more important buildings and their fire-resisting qualities will be studied by our Washington representative and published in March number.

Lack of Responsibility Defeats Revised Building Laws.

Now that the coroner's inquest on the Iroquois Theater disaster is ended and the jury has rendered a verdict holding those both directly and indirectly concerned as responsible, it remains for the grand jury and the "law and the evidence" to decide upon the culpability of each. But that the public who occupy buildings when constructed may have some assurance that both life and property are

as secure as modern science and constructive experience, aided by the costly example of the Iroquois, may make them, certain deductions should be made from this coroner's investigation. In the rush to amend the building laws, not only Chicago, but cities generally, seem to have lost sight of the main "factor of safety," without which no plan is complete and no law adequate, and this is responsibility. In each new building ordinance, as far as we have observed, this indicating where the responsibility for nonperformance lies has been left out or only intimated generally. It is taken for granted that architects all consent to the general proposition of a natural plan for an auditorium and know what that means. But when such a structure is planned and erected it should be inspected by a city official who is held personally responsible, not by inference, but by law, for its correctness. Then the law should go further. It is not enough that the number of exits, width of aisles, halls, stairs, etc., should be adequate and all the detail of apparatus installed, but the blame for failure in the operation of any one of these should be definitely fixed.

First. Put a city fireman in charge of the stage ventilator at each performance. Have him register his name as the man who is to have this particular position. Put him under the pain of personal responsibility in case of loss of life from leaving his post during any time when the fireproof curtain is up.

Second. Place the management of the fireproof curtain in the hands of somebody registered for that position for each performance and make him responsible if he leaves his post while the curtain is up, and require the curtain to be down except during actual performance, at all times when the theater is occupied.

Third. Give some individual the responsibility for the efficiency of the stage sprinklers.

Fourth. Select and register the firemen who are to have charge of the fire hose on the stage and hold them to penalty if accident occurs by their leaving posts at any time when the curtain is up.

Fifth. Place upon the shoulders of the chief usher the responsibility of the exits being in good lawful condition.

Have the names of the people in charge of these things registered before each performance begins, and let an officer of the police department or fire department, whose name is to be kept in each case, give permission in writing for the fireproof curtain man to open the performance.

By actual experience it will be found that if in the office of the fire department "John Jones" for the afternoon performance in a given theater and on a given day is registered as the man to have charge of the fireproof curtain, and held responsible for the operation of it, "John Jones" will not only be there, but will not raise it unless it is all right. Also, if "James Robertson" is designated and registered at this same place for the afternoon performance in charge of the stage ventilator, there will be no performance unless the ventilator is in order and will operate when the occasion demands it; and so with the others, so that when the chief officer has seen each man at his post and that each man's name is down as the man for each particular work, there will be no occasion for panic in case of fire.

It is only by the insertion of some such definite responsibility clause in the city ordinances that the main cause for such terrible results as those attending the stage fire at Chicago can be avoided. In this case the owners looked to the contractor and the city inspectors; these, in turn, looked each to the other departments or individuals. In general, the mayor of a city should be responsible, so that he will appoint only those whose ability and faithfulness he can trust, and these in turn should be compelled by the building laws to require definite responsibility from each subordinate. As the law stands now, none of these things are required and the public is no more safe than it was before the steel and asbestos curtains were installed, pitch of galleries lowered and exits multiplied, for the one requirement that makes for safety in panic is lacking—that of direct responsibility.

RAMBLES IN AND ABOUT FLORENCE.—HER ART TREASURES AND THE CAMPANILE.

BY J. E. O. FRIDMORE, ARCHITECT.

(Concluded.)

It had always been a mystery to me that photographs of these buildings should so closely resemble line drawings, and very mechanical ones at that. The first sight I had of the Campanile told the story, and I understood why these three buildings have always constituted the photographers' nightmare. Can they ever be anything else? Crossed, seared and mutilated as they are in all directions by the repellent stripes of black. Some one has very naively written that the visitor to Florence should not fail to see the Campanile by moonlight. Happy suggestion, and the Campanile would greatly profit if we might all be night-owls—and the less light the better.

Truth to tell, the hard, contrasted black and white of these buildings can not stand broad daylight, while moonlight has a softening effect much kinder than the sun's bright rays.

The Baptistry, the oldest of the trio, having been constructed principally in the eleventh century, is interesting solely for some



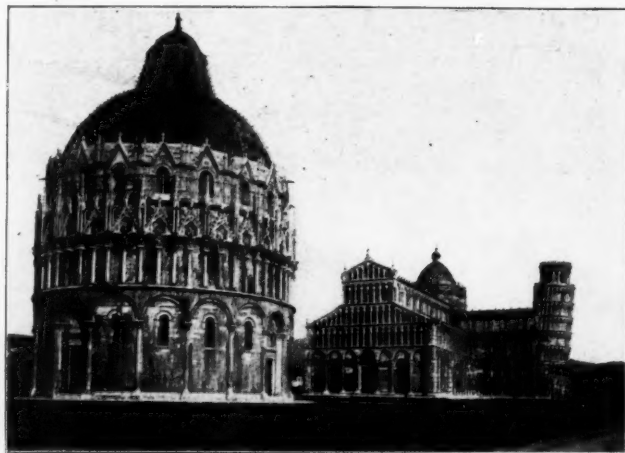
Firenze Loggia di S. Maria della Misericordia detta del Bigallo

very fine mosaics in the Byzantine style, and for the bronze gates at four entrances. One pair of these, designed by Ghiberti, are so beautifully worked that M. Angelo declared them fit to be the gates of heaven. The reliefs in the panels, representing Scriptural subjects, are marvelous in exquisite and minute detail and probably have never been equaled.

But, as in all these ancient bronze doors throughout Italy, the ordinary square panels seem to me absolutely unstudied and unworthy of their reliefs. The exterior design of the Baptistry is a casing of black and white marble, added by Arnolfo di Cambio at the end of the thirteenth century. The design is a succession of crude, ill-fitting panels with such meager cornices, lacking projection, as to render the building positively ugly.

The Duomo was started a little later, and Giotto had charge of its construction for thirty-six years. Some of the exterior detail is excellent, and it boasts the widest dome in the world, after which M. Angelo is said to have fashioned the exquisite cupola of S. Peter's. Giotto, the painter, set himself to build this cathedral painter fashion. The beautiful white marble of Carrara was to be his canvas, the black and red marbles were his colors—and he used them! Black stripes for panels one above another, and in courses without rhyme or reason, always avoiding bold

projections and any natural play of light and shade, for was not the material here to simulate the shadow—a painter's idea, carried in the three buildings to a lamentable result. There must be no real shadows, no real play of light and shade allowed, for that would defeat the object, which was to *paint these in!* The west front of the cathedral, which has been added in late years,



BAPTISTRY, CATHEDRAL AND LEANING TOWER AT PISA.

conforms to the original scheme; which perhaps should be forgiven, considering also that the detail is exquisite.

There is little of interest in the interior, which is cold, dreary and in every sense uninviting. I believe it was Ruskin who said a worse interior would have been impossible. The only redeeming features are Della Robbia's beautiful glazed terra cotta panels, the "Ascension" and "Resurrection."

The Campanile, Giotto's supposedly great achievement, bears the same characteristics as its neighbors, but is a better geometric composition, if that carries any praise. Its detail is quite as good as that of the Duomo, and in the exquisitely beautiful openings in two upper stories it contains some really architectural features. There are some beautiful reliefs in lower story, giving the history of man's development, with a row of statues above, all carrying out the pictorial ideas of the originator. But these features have been added by Giotto's successors, he himself is answerable only for the main mass of the tower. And what a thousand pities that such wealth of varicolored marble should be put together with such lack of all architectural proportion as it exhibits; five pretty equal stories, one upon another, with similar moldings, similar



TRIBUNE ROOM, UFFIZI GALLERY, FLORENCE.

panels of red with black and white edgings (here again to signify light and shade in the absence of any real projections).

What could be more inane and meaningless? It must, however, be said in justice to Giotto that his original design was for a 100-foot steeple to crown the Campanile; if he could have refrained from any additional stripes and chequers, a tall and

stately spire would have had a subduing and very happy influence on its giddy substructure. But he was not to be trusted for this; and the heavens would have rebelled against such an invasion as Giotto, the Genius of Frescoes, of all others, might have reared.

The mean, insignificant portal, in its ill-judged position, with a buttress starting above it—this and other evidences of unconcern as to architectural composition breathe the painter's instinct, and proclaim louder than words that Giotto had better have been at work on his frescoes, where he indeed was supreme.

Such are the three greatly overestimated buildings of which Florence boasts. I may say it is a relief after studying them to run down to Pisa (two hours by train) and see what has been done there in the same field—Baptistry, Duomo and Campanile—by men who, if they had not the same means or wealth of material at their disposal, at least understood the value of architectural composition, and of light and shade as nature aids man to obtain. The leaning tower, whose massive bells thunder out every hour in the topmost story without disturbing the equilibrium, is a wonder in its daring obliquity; even as it is also pleasing and refined with its graceful stories of arcades and diminished belfry. The cathedral of Pisa is a noble pile and its interior ranks easily with the best of Italy's churches. The Baptistry is an architectural design, which can not be said of the one at Florence. Pisa's Baptistry, however, is notable for its wonderful echo, used as a means of income by the caretaker. This individual strikes a tragic attitude and, singing in various keys, obtains marvelous results, as of the swelling of an organ in the dome where the echo reverberates. In the beautiful "Marble Church" at Copenhagen a similar echo has been "cured" by a large-meshed net strung just below the spring of dome, where generally it is quite unobserved. But with the Pisans it is different; they have no idea of killing the goose of the golden egg, so the echo is exploited (first time to my knowledge) as a meritorious attribute of the building. How many of our modern churches and music halls could well fill the same rôle?

But the thing which attracts one most at Pisa's celebrated group is the subdued monotone of color; at once pleasing and restful after the irritating barber-pole style of Florence.

But even without leaving the Piazza del Duomo at Florence this same lesson may be learned. Just across the street from Giotto's Campanile is the unpretending little Gigallo, as elegant a composition, as chaste a piece of detail, as artist wants to lay eyes on. Its beautifully paneled arches, its graceful columns and pilasters which run up to support the dainty overhanging roof—all are so skilfully woven together in so simple but strikingly meaning design that from all the imposing medieval buildings Florence boasts I would single this out as most worthy of admiration, the gem of all. And, moreover, in its quiet monotone it stands the most striking reproof possible to administer to its three striped neighbors of undeserved renown. Give credit where credit is due; Florence has so much that is worthy the art student's admiration, and happily the store of treasures in her magnificent galleries atone for one's disappointment in the Duomo group.

THE SIGNIFICANCE OF ROME TO THE AMERICAN ARCHITECTURAL STUDENT.

BY AUSTIN W. LORD.

TO define clearly what is meant by the significance of Rome to the American architectural student, it may be well first to go into detail to a certain extent to show just what has been accomplished up to the present time by the American student in Rome and under what conditions he studies and lives.

The existence of the French Academy in Rome has been a great object lesson to all architects and architectural students, and for a long time the need of a rendezvous in Rome has been most seriously felt by students from this country. The growing tendency in this country within the last few years toward the classic and renaissance forms and a growing love of the antique in all branches of art, together with a thorough appreciation of Rome in the architectural world, led to the idea of the founding of the Roman school. The present president of the institute was the leading spirit in this undertaking, and he associated with him the representatives of the different universities, who pledged a certain number of students. The school was organized in the autumn of 1894, and was composed of scholarship men and others

traveling on their own resources. The object of the school as then outlined was to afford greater opportunities to the traveling student to pursue his studies in Rome and other cities of Italy by securing for him, without loss of his time, permits to visit the galleries and museums, and to study and measure the antique monuments in the city.

It is not my purpose to go into the details of the difficulties of the first year's existence of the Roman school—the weeks and months of waiting and repeated unsuccessful attempts to reach the heads of departments of the Italian Government and secure satisfactory recognition. The French school has existed for two hundred years in the city of Rome, and there were also the German and Spanish schools, and certain representatives from other governments who had the freedom of the ancient city, yet the American student was an unrecognized factor, and it was only after months of the most persistent effort that the school was finally recognized and its students allowed free access to the ancient monuments, museums and galleries.

With our work laid out and the road clear, the serious work of the school commenced. It consisted in visiting these monuments, studying and measuring important details and making careful restoration to scale, at the same time studying the history of ancient architecture and in periodical visits to the galleries and museums.

The more advanced work of the second year included the measuring and the restoration of plans, and visits to ancient buildings and a trip of observation and study through Sicily and to Athens.

The experience of the past few years has shown us very clearly just what it means to go to Rome with a view to an intelligent study of her great antiquities. No one can deny that a certain amount of benefit accrues to even the novice who may go there to study, but we have but to point to the example of the French school to illustrate forcibly the importance of a certain amount of thorough training before the student enters upon his important mission. We all know that no one but he who holds the grand prize enters the French Academy at Rome; whether it be in architecture, painting, sculpture, music or engraving, he must have passed through a certain rigid course of training and experience before he is allowed to launch into the world of original research and make his own way.

Thus we see men of seven, eight and ten years' experience in the different arts, under the best masters and under the most favorable conditions, seeking Rome and Greece as the ultimate and crowning step in their educational career. These men, representing the different arts, are associated in the Academy under somewhat the same influence they had experienced at home; that is, the influence of association one with the other which encourages the interchange of ideas. In other words, the atmosphere is there created which is most conducive to the successful study of their art. Further, they are led by a master who is himself an artist and who may be either a painter, sculptor, or an architect. Thus we have the ideal situation of the student in Rome.

To learn the true lesson from Rome or Athens or any other center of ancient art, to appreciate the greatness and the meaning of the things done in centuries past, it is absolutely necessary that the student should be thoroughly well equipped in the groundwork of his profession.

In founding the Roman school, it was not the idea to attempt to put it upon the same footing as the French Academy. It was intended merely to establish an anchorage where the student of certain attainment could have facilities for studying up to the limit of his capacity whatever Rome and Italy had to present. The policy of the school has not changed much in this regard, except to become more restrictive in its membership.

Admitting that our men are receiving a certain amount of benefit by being sent to Rome, is it not extremely important that we should take steps by which they should realize the full importance and get the full benefit of the valuable years spent in the foreign city? In other words, we manifestly can not be doing strict justice to a young man by rushing him off to Rome after a four years' course in a university or college, two years of which time at the most is all that he is able to give to architectural study, and of these two years practically one year only is given to serious design. As architects, we know how little these men know of architecture when we come to employ them in our offices. They are not expected to have a wide knowledge of the subject. They are in no way fit to be launched on the world to pursue their studies on original lines, for they hardly yet know the A, B, C of architecture. The same might be said of the sculptor and the painter, the musician and the engraver. Let each one of these men pass under the hand of the master before he starts on the road of original research, and then we shall be quite sure that there will be no backward tendency on his part once he is launched.

I desire to argue in the strongest terms possible against the idea of sending forth untrained men to Rome. There are two alternatives left to us—one of which is to utilize the foreign schools, the other is to train our men at home. As we have no advanced school of art in this country, my sympathies lie in the direction of the French school as a place of training for the young men in our profession. For reasons which have been enumerated above and which are apparent to all, this seems to be the wiser alternative at present. I think it is the hope of the profession in this country, to realize the establishment of a great

* Read before the thirty-seventh annual convention of the American Institute of Architects, at Cleveland, October 15, 1903.

central school of architecture, painting and sculpture, which shall give our students sufficient training to make them thorough architects. If, through superior attainments, a certain number of these students win the Roman prize, so much the better. They will certainly be in a position to profit by their extended study abroad. I should be the last one to recommend any procedure based upon the idea of depending permanently upon the French school as an element in the development of our architecture. Such a plan would indeed be a poor indication of belief in our artistic future and of confidence in our national ideals. But, in order that we may in the future become independent of this influence, it is surely most essential to profit to the greatest possible extent by the example of thoroughness, consistency and continuity in policy of which the French school is to-day the most conspicuous example. When, by the establishment of a central school founded upon the broadest lines, we have brought the student under the influence of a course of instruction which, in addition to a corps of distinguished specialists, enlists the services of a body of our strongest practicing architects, and have thereby insured a policy for the school which is influenced by correct theory on the one side and the actual practice of the profession on the other, then, and not till then, can we look forward to our emancipation from a dependence upon foreign schools. For the realization of such a project as this the organization already exists, the attitude of encouragement and willingness to collaborate in the initial steps of the American school at Rome already evinced by the American Institute of Architects, and by the authorities of the universities where schools of art have already been established, and the official recognition already accorded to the project by the United States Government have brought about a situation which renders comparatively easy the taking of this further step and thereby rendering complete the ultimate object of the founding of the Roman school, namely, that the men upon whom the duty is to devolve of solving the great artistic problems presented by our civilization shall be trained by ourselves and so equipped as to enable them to go directly to the sources of our artistic inspiration without the aid of any intermediary. I feel that I can not take a purely optimistic view of the results to be accomplished by the American student under his present status. With few exceptions the Roman students have been poorly equipped for the kind of work they are expected to do, and the longer we delay in this preliminary preparation of our men the longer we delay any beneficial results to art or architecture in this country from that source, so that, in the consideration of this subject, I am taking the ideal architectural student who has a knowledge of the fundamental principles involved in the production of an architectural work. It is not enough that he should have a good idea of proportion as regards plan, elevation and detail, but he should have such a familiarity with architectural forms as will enable him to compose readily; an idea of the fitness of things, and, with all, imagination. He should have a knowledge of construction and, while it is not expected that his constructive abilities shall take him necessarily into the realm of the engineer, he must have an idea of the relative proportion of the constructive members and their composition to enable him to design with freedom. I urge that he should study classic architecture, but not to the exclusion of every other style. However, it seems to have been quite clearly illustrated that where one particular style is studied systematically, where the theory of the proper adjustment and relation of parts is studied from a scientific standpoint, it should enable the architect to design successfully in any style. Our student should have a knowledge of the history of architecture, which should include a considerable knowledge of decoration and sculpture. During the course of his studies, his association with students in the other arts will have enabled him to form certain fixed ideals which, although his future studies may to a certain extent change them, will still give him some point of departure in the course of his advanced work.

Entering Rome he thus has an appreciative understanding of what Rome has to show. The purely mechanical part of the work he has already mastered. He is in a position to know of and to study intelligently the variety of detail and an unlimited number of practical solutions of the difficulties which constantly confront the architect in the development of designs. His attention is naturally attracted to the principles which govern, and his training should lead him into the way of studying all his subjects in the broadest way. In his more advanced studies concerning the restoration of plan and elevation, his imagination may be allowed free play, as the ultimate object of restoration is not necessarily to reproduce the exact monument, but to develop a logical superstructure from the plan and fragments that exist. The restoration of monuments is not wholly for the purpose of obtaining exact data of certain interesting architectural motives and details. While this side of it is useful to a certain extent, the great benefit derived is in searching out the solution of problems from the standpoint of the ancient architect who was not trammled by any school and who solved many great and original problems in the simplest way, and without many precedents to guide him he resorted to a logical system of developments; further, the limited number of types of buildings required at that time enabled him by a constant repetition to secure the most perfect results possible. Thus, through the medium of restoration work, the student is brought in closer relation with the ideas of the early artists, and interest in his work is enhanced by the feeling that he is put in position to discover new and better methods of solving varied problems in architecture.

Still further value has accrued to architectural students through the work of the Archeological schools in foreign countries—notably the work of American, German and French schools in Greece and that of the Italian Government in Rome and other cities of Italy. It has undoubtedly generated a taste for the antique which is so marked a feature of the prevalent taste throughout all civilized countries.

What is true of architecture in this respect is also true of the sister arts of painting and sculpture. The student of architecture in Rome can not shut his eyes to the influence of the ancient productions, for there will be impressed upon him in the most forcible way the intimate relation and association of the three arts and he will realize how barren would have been the results achieved by modern artists without the great examples which have been restored to us from the work of the ancients. While the ancient examples in fresco in our day are of course rare, the art of the renaissance profited by the then existing examples and through them the student is put in close touch, not only with the ancient work, but with the splendid development of the fifteenth century. Here again we see the advantage of the association of students in the various arts. The student of architecture can not well make a complete restoration without thought of the painted decoration that was so necessary to its success, nor without the sculptural adjunct which was even more prominent during the best Greek and Roman periods, as well as during the renaissance. In this way we see produced at the hands of the architectural student in Rome a delineation of baths, for example, which gives us, if not a perfectly accurate reproduction of the original, certainly a logical reproduction including everything necessary to the successful operation of the system, from the heating plant in the substructure to the last detail of the crowning features. This includes, first of all, a very carefully studied plan, showing a proper relation between all the various functions. It shows methods of construction throughout, methods of decoration in brick, terra cotta, marble, stucco and fresco. In other words it is a veritable project, developed of course under different conditions than existed in the school, yet under conditions which appeal vastly more to the imagination of the well-equipped student, and under conditions which have a more practical as well as esthetic side.

This kind of study would seem to be the nearest approach possible to the work of designing for actual construction, and naturally brings the student more into the attitude of a practicing architect, which is, after all, the ultimate end of foreign study.

I have already alluded to the great systems of baths which offer such a wide field for the work of restoration to students abroad. Let us look for a moment at the remarkable array of palaces, with all their elaborate and complete accessories in the way of furniture and decoration, gardens and approaches, a study of which has given the world a comprehensive idea of the domestic life of the ancients; their temples and tombs, the study of which has given us an idea of their religious practices, their forms, which in one chapter almost cover the political history of a nation, together with the Colosseum, the theater, and the hippodrome, which, through the aid of the archeologist, practically completes the history of the life and manners of these ancient peoples. As a portion of the work of the Roman school lies in Greece, it is interesting to recall to mind the influence of Greek art in Rome, for, as Laloux says, "it was there that the Greek artists were found again. They there received and modified for the needs of their conquerors the traditions which had made the grandeur of their country, but before calling to herself these artists Rome had already enriched herself from the spoils of vanquished Greece; Marcellus, Mummius, Scourus had pillaged Syracuse, Corinth and other cities; Sylla had sent to Rome a certain number of columns from the temple of Zeus at Athens to decorate the temple of Jupiter Capitolinus." He further says that, "with Nero, the most beautiful works of Greek art passed into Italy; the oldest sanctuaries—Olympia, Athens and Epidaurus—were pillaged, the ancient consecrated places despoiled, furnished from these alone five hundred bronze statues which came to ornament the forums, the circuses and the imperial palaces." The recognition by the Roman of the supremacy of Greece in the arts is so well known as to render further illustration unnecessary, but a fact not so generally appreciated is the analogy of the forms and the disposition of similar edifices of the two peoples. This similarity is most marked in temples, forums and theaters of the Romans, which are similar to the temples, agoræ and theaters of the Greeks; to the gymnasium corresponds the baths, to the hippodrome the circus.

I have mentioned above the evidences apparent on every side in Rome of the close study devoted to the ancient monuments by the great men of the Italian renaissance, such as Scamozzi, Bramante, Palladio, Vignola, in architecture; Michael Angelo, in all three of the arts; Raphael in his decorations and paintings, and the later men in their respective works all bear testimony to this. This may be regarded as natural and almost inevitable, but if we turn to France and England and examine the early studies of such men as Pierre Lescot, Jean Goujon, Le Notre, Wren and others, leaders of their respective periods, we still find remarkable evidence of exhaustive study and appreciative comprehension of the ancient work. In view of the recognition of the supremacy of the Greeks in the arts, the unequalled perfection attained by them in their architectural forms, the question may well be asked, Why is Rome the ideal location for such a school? A complete discussion of this point would naturally

be voluminous, but it may, I think, be briefly summarized thus: In Greece we find very perfectly studied developments of a very limited number of types, while in the Roman work, although the standard of perfection never reached the same height as in Greece, a vast number of new architectural types appeared contemporaneously—types which are more readily applicable to modern requirements, and it is therefore the architecture of Rome rather than Greece that must be regarded as the foundation and inspiration of the modern world.

Before leaving the consideration of Rome as a place of study for the American architectural student of to-day, it seems appropriate to dwell for a moment on the tendencies of modern architectural study as exemplified in the leading schools of the world in order to determine wherein the instruction of the schools is insufficient and in what direction it should be supplemented from other sources.

The great variety and wide divergence in the problem submitted to the modern architect for solution both in the schools and in practice is constantly tending toward the elaboration of what may be termed the technical or scientific side of his development as compared with the purely artistic side. In other words, the architectural profession to-day is engaged in the development of certain types of architecture to meet, in many cases, an entirely new set of requirements and conditions, and hence the encouragement of the faculties of logical reasoning and resourceful ingenuity attain undue prominence as compared with that of the purely esthetic sense. It should not be understood that this tendency is to be regarded as an unhealthy one. That the architecture of any period must be truly useful and appropriate in order to be truly beautiful is axiomatic, but, if architecture as a fine art is to maintain in the future its supremacy over architecture as a profession, it is manifestly essential that at some time during the course of his professional preparation the architectural student must place himself in an environment where the modern conception of buildings, as a logical expression of utilitarian requirements, may be temporarily forgotten and where he may come into intimate touch with the pictorial and sentimental side of his art and draw his inspiration from the same archeological sources that have inspired the leaders of successive architectural periods for hundreds of years.

The student who has undergone an adequate preparation for such a course of study as opens before him upon his arrival in Rome is presumably thoroughly familiar, so far as books, drawings, restorations and photographs can make him, with all the important monuments of the ancient city. This being the case, the question arises: Why prolong his stay there further than is necessary to enable him carefully to inspect all those things whose general proportions and aspects his studies have already made familiar to him and to render permanent the mental impressions received from them? Upon the answer to this question depends, I think, the determination as to whether the founders of the American School at Rome have done a wise thing, or an unnecessary one. The formation of permanent tastes in art and the determination and separation of the essential and the nonessential qualities present in any work which has strongly appealed to us are necessarily slow developments. All of us have experienced the surprise in returning to a city, or a picture-gallery, or an opera after a long interval, of finding our admiration strongly aroused by a building or a picture or a melody that has previously made no impression upon us. Brief impressions, though frequently the most vivid in their appeal to the imagination, are seldom just in their discrimination and are usually subject to revision when familiarity has given an opportunity for more analytical comparison.

The student who enters Rome with a thorough knowledge of classic forms and details and of the forms and details which have been the gradual outgrowth and development of them throughout the last twenty centuries, enters upon a period of careful analysis and comparison. He has before him in the Forum, in the baths, in the Colosseum, and the Pantheon, in the temples and the tombs and the arches, the elementary fundamental forms from which, as a starting point, his entire architectural education has progressed. These things are presented to his study in all the austerity and simplicity which comes from the complete elimination of trivial details or utilitarian accessories, and in many cases from a state of partial destruction and entire absence of detail.

In juxtaposition to these he has examples in bewildering array of the developments of these primitive forms, of the radical departures from them and reversions to them which form the architectural history of Italy, and with the knowledge previously gained of the architecture of France, England, Spain and Germany, he is in a position to trace every step in the evolution of modern architecture.

With such a preparation this is the opportunity most necessary for the American architect of the future. In order to utilize the instruction of the schools for the betterment of the architecture of his country and his period, he must learn to distinguish between the essential qualities that give to classic architecture its simplicity, its grandeur of scale, its repose and its refinement, and the nonessential details which may be varied without the sacrifice of these qualities. In the varying degrees of decay that mark the ruins of ancient Rome, he learns to what a slight extent these monuments depend for their majesty upon the particular details he has been taught to regard as their most distinguishing characteristics. He realizes as never before that

what we call scale, the adequate expression of the bigness of things, is a quality inherent in the proper proportioning of masses and has an existence entirely independent of the details and accessories which are too frequently employed in modern buildings to supply by means of their size and position the lack of the quality itself.

Our student has for years been confronted in the schools with problems involving a great multiplicity of requirements. He has been taught to strive for the kind of simplicity that results from the orderly arrangement of complicated parts. Upon his return to America and his entry upon the practice of his profession the complications will obtrude themselves with still greater insistency. Now, for the first time and perhaps the last, he is in touch with that kind of simplicity in architecture which consists in the entire absence of complicated parts. He has reverted to an architecture of first principles. In the light of this architecture, he is to form anew his estimate of all subsequent periods and styles. At last he has before him a standard by which he can decide for himself with authority what are the healthy logical developments necessary and proper for the application of classic forms to modern requirements and which of all the changes that have been wrought in the classic forms and of all the new motifs that have been grafted upon them are worthy of preservation and further development.

Of all the benefits that Rome has to confer upon the student, this, it seems to me, is the chief. This is not to be gained in a few weeks or even months. The rapidity with which it is to be gained depends upon the adequacy of his previous preparation, but, under the most favorable conditions, two years is barely sufficient, and this extra time added to the term of preparation for architectural practice puts the student in a position to make his own enduring personal contribution to the architectural progress of his period, and, if properly utilized, frees him from the necessity of making choice between a rigid adherence to archaic forms on the one hand and on the other a weak dependence upon the conclusions of other minds in adapting his work to modern requirements. Short as is the architectural history of this country, we have nevertheless already seen two or three distinct periods of departure from classic precedents and, if the present reversion to those types is to become the beginning of a permanent and orderly march of progress, it will be by means of the educational influence of a body of men who have supplemented their study in the modern schools by such a course as this, and who are thereby fitted to distinguish between the kinds of originality possible within the bounds of a well-ordered and imaginative adherence to fundamental precedents and the mis-called originality that seeks distinction in the neglect and outrage of well-established laws.

REGARDING SCHEDULE OF CHARGES.

At a recent meeting of the Brooklyn Chapter of the American Institute of Architects, Arnold Dehli read a paper which had some points of interest, from the stand taken by the writer in regard to the percentage basis of the schedule of charges recommended as "usual and proper" by the American Institute of Architects. Mr. Dehli's remarks bearing on the schedule of charges were as follows:

"With architects, the question of proper remuneration for services means even more than personal and professional recognition—it means opportunity to do good work. It means appropriations to execute complete and careful drawings, to carefully study designs in all their bearings, to employ experts where needed, and finally, to provide the inspection and tests needed during execution. In this struggle the architects are, therefore, as a matter of fact, attempting to protect the public against itself. Broadly speaking, no profession or men engaged in any separate line of endeavor can approach the public except on the score of public benefit. The architectural profession fills this requirement in a double sense, namely, in that it strives to protect and further the interests of good and honest practice, which is in itself beneficial; and also in working to produce conditions which make the annual output of buildings better and more valuable. The questions arising out of this struggle are live and real ones, and have a direct bearing on the creation of modern architecture. They should, therefore, be of general interest at least to some extent. It is, of course, to be understood that the issue between theory and practice is not generally drawn on questions of this kind, at least not directly.

"Considering the complexity of architectural work and conditions generally, the present compensation is not sufficient to do the work under the most favorable conditions. The result is an unnecessary amount of fieldwork, which is both expensive and slow. While this struggle for proper compensation for architects' services is thus amply justified, we must, on the other hand, admit that the percentage system now in vogue is at least open to question. Historically, percentage rules, and more particularly the five per cent rule, undoubtedly came into being as a fair average for the public buildings of France. Previous to the end of the eighteenth century, practically all architects were paid salaries or grants.

"It is becoming more and more evident that a number of architects are beginning to harbor grave doubts as to the merits of the five per cent rule of compensation and similar percentage rules. The difficulties of amending so as to meet the ever-increas-

ing complexity of conditions of architects' employment are steadily increasing and the difficulties of each individual architect in persuading his clients to recognize these amendments are greater still, and in a great majority of cases, probably insurmountable.

"With the labor unions, the unit of compensation is a day's work—alike for all members of the union. With the architects of the American Institute of Architects, the unit is the dollar expended in carrying out his design, being the "minimum charge" in both cases. There are necessarily points of difference, but it is hard to see any great difference in the principle. It is hard at a glance to measure the viciousness of this basic principle of our present schedule, so ramified are its injurious effects.

"Draftsmanship is only a part of an architect's work, and as history has shown in several important instances, not an indispensable one at that. There have been many architects of the very highest order who have been indifferent draftsmen. Legions of the most accomplished draftsmen whose work in execution proved as bad as their draftsmanship was good. We all know plenty of instances of this kind. This neglect of the distinction between draftsmanship and architecture is alone enough to condemn competitions as they now exist, without mentioning the host of iniquities to which they open the door.

"There is really no difference between the proportion of having a patient call in an open competition of doctors on his case, a litigant calling one on his and an intended builder calling one of architects. Their professions are too well organized to be made to look cheap in that way—ours is not—and let me say *en passant*, our leading associations are organized on too narrow and exclusive lines to render it likely that they ever will enroll as members such a majority of the practicing architects in the United States as to obtain the power to so regulate professional affairs.

"Whatever may be thought of the above reasoning, I think there can be little doubt that percentage rules and competitions make for the same goal; tend to lower and discredit the architect's work, to make it harder and more difficult than it should be."

NOT BUILDING LAWS BUT FIREPROOFED STRUCTURES.

WHEN a theater disaster occurred recently at Chicago, attended by great loss of life, not from fire, however, so much as from suffocation, the attention of the public was first directed to the danger from fire on the stages of theaters and then to the laxity of all building inspection in a great city. In examining into the causes which led to this disaster the building inspectors, from the Commissioner down through the rank and file, were examined under oath, and the public was shocked to find that practically no efficient or effective inspection of buildings existed. There were men appointed to this duty, it is true, but who stated that they never received written instructions and never reported other than verbally upon any construction. While the ordinances placed the duty of inspection and regulation in the hands of the building department and the fire department, each threw the responsibility on the other, and the heads of each in turn charged the laxity not to themselves but to their subordinates. In fact, it was found that practically no effective carrying out of the laws regarding the inspection of buildings had been in operation for years. The situation developed in this instance is true in a greater or less degree everywhere, and is the fault of a system rather than of individuals, and not only in buildings but in every department where inspection is demanded. A plumber is appointed boiler inspector, the grain inspector at Chicago was said to be a shoepeg maker (he certainly was not a grain man) before he was appointed to the office of grading the grain that is sent to the markets of the world. Seldom is a man selected because of his peculiar knowledge, but usually because of his influence with the appointing power. The best, most capable and reliable building inspector Chicago ever had was powerless to prevent infractions of the building laws, because the council would issue special permits over his head. This being the case the public can not depend on building ordinances, be they ever so stringent in their requirements, or on inspectors for safety. But they can depend on the structure itself when it is built with that intention and therefore is properly fireproofed. It has been too common in the erection of all classes of structures to leave this "factor of safety" out of consideration if not called for by some building ordinance, and where it is the effort is made to obtain the cheapest construction that will comply with its demands.

The effect of this stage fire and the consequent loss of life and the investigation which followed, in which such extraordinary laxity and inefficiency of administration developed and all sorts of hysterical measures were proposed, should be to urge architects to give greater stress to the necessity of fireproofing when advising their clients. Not alone in the office building and warehouse but in every class of structure. The variety to which clay in the shape of hollow tile can be molded is endless; its cost is but little in advance of brick and wood construction, and in its safety as an investment, aside from its safety as a place where human beings may be lost, demands that fireproofing tile in some form should be used. But its use will have to be forced by architects who design, rather than the owners who pay. Architects know that the uses to which hollow tile can be put are endless and that its perfect security against fire, as well as adaptability,

is sure to relieve them of all moral responsibility when a fire occurs. Building inspection will always be lax and those in control of structures after they are occupied careless, and the only security lies in adequate fireproofing. Fortunes have been spent and the lives of capable and practical men occupied in perfecting the uses of hollow tile, and nothing is more indestructible, though the elements be fire, water or the general disintegrating influences of time, than burned clay. The lesson of every fire is, "Fire-proof every structure in the best manner possible."

DRAFTS AND CHIMNEYS.*

THE housebuilder, generally speaking, is satisfied if the chimney of his residence looks well and balances the general appearance of the house.

That it should become a matter of great importance and serious calculation, seems to be entirely unnecessary, as most chimneys look alike to him, and so long as it seems right to him, all else is taken for granted.

It has been said, on the other hand, that nine-tenths of the trouble people have with heating apparatus—not only that, but with boilers, ranges, furnaces, etc.—is caused by badly proportioned, poorly constructed chimneys.

It is quite proper to give a subject upon which so much depends, some thought, and it has been shown again and again that a due appreciation of some of the simple rules of chimney design would not only obviate many positive discomforts in a home, but prove to be the remedy for a so-called faulty heating apparatus.

One of the first problems given to a student in engineering is to calculate the size and height of a chimney or smokestack for a boiler of a given capacity.

If the heating apparatus does not work satisfactorily, the blame is immediately and without fail put upon the boiler or heater, and consequently, upon the company which manufactured it. This is a great injustice to both, provided a thorough investigation of all the conditions is not carried on. The piping, amount of radiation, placing and exposure of same, improper arrangement, and last, but by no means least, the draft or chimney, are many causes which disturb satisfactory results.

In the crowded city, chimneys sometimes have a hard time to breathe, houses are packed together so closely that the breezes which may prove beneficial to one chimney may pitch down upon the next and choke it, or swirling around the corners of walls or over the comb of the roof of the same or adjoining buildings, may render them useless.

In the country, a tall tree, or adjoining high building or cornice may cause the same trouble. These chimneys should either be built up or enough pipe of proper diameter added to carry them free and clear of all obstructions.

It is well to remember the old experiment of baking bread in a cook-stove, set up out of doors, with three joints of pipe only for a flue, and the temperature at zero, yet this same stove is not certain to bake bread if attached to many flues indoors.

Draft is a property of the chimney, and the chimney alone. It varies directly in strength as the chimney is low or high, as the area of the chimney and the shape of its cross section.

SYNOPSIS OF REPORT OF CORONER'S JURY ON IROQUOIS THEATER DISASTER.

IN order that the results of a most exhaustive investigation of the Iroquois Theater disaster by the coroner, the evidence occupying twenty-two days, with one hundred and seventy-nine witnesses, covering three thousand pages of typewritten matter, may be understood, including, as they do, deductions regarding the main necessities in the regulation of theaters, the following extract from the verdict of the jury is given. The causes of the disaster were enumerated as follows:

"Grand drapery coming in contact with electric flood or arc light, situated on iron platform on the right hand of stage, facing the auditorium."

"City laws were not complied with relating to building ordinances, regulating fire-alarm boxes, fire apparatus, damper or flues on and over the stage and fly galleries."

"We also find a distinct violation of ordinance governing fireproofing of scenery and all woodwork on or about the stage."

"Asbestos curtain totally destroyed, wholly inadequate considering the highly inflammable nature of all stage fittings, and owing to the fact that the same was hung on wooden battens."

"Building ordinances violated in closing aisles on each side of lower boxes and not having any fire apparatus, dampers or signs designating exits on orchestra floor."

"Building ordinances violated regulating fire apparatus and signs designating exits on dress circle."

"Building ordinances violated regulating fire apparatus and signs designating exits on balcony."

"We hold Will J. Davis, as president and general manager, principally responsible for the foregoing violations in the failure to see that the Iroquois Theater was properly equipped as required by city ordinances and that his employees were not sufficiently instructed and drilled for any and all emergencies."

"We hold Carter H. Harrison, as Mayor of the City of Chicago, responsible, as he has shown a lamentable lack of force, in his efforts to shirk responsibility."

"We hold George Williams, as Building Commissioner, responsible for great neglect of his duty in allowing the Iroquois Theater to open its doors to the public when the said theater was incomplete and did not comply with the requirements of the building ordinances."

"We hold Edward Loughlin, as Building Inspector, responsible for

*From *The Boiler Magazine*, Kellogg-Mackay-Cameron Company, Chicago.

gross neglect of duty and glaring incompetency in reporting the Iroquois Theater 'O. K.' on a most superficial inspection.

"We hold William H. Musham, Fire Marshal, responsible for gross neglect of duty in not enforcing the city ordinances as they relate to his department.

"We hold William Sallers, as fireman of the Iroquois Theater, for gross neglect of duty in not reporting the lack of proper fire apparatus and appliances.

"We hold William McMullen, electric-light operator, for gross neglect and carelessness in performance of duty.

"We hold James E. Cummings, as stage carpenter and general superintendent of the stage, responsible for gross carelessness and neglect of duty in not equipping the stage with proper fire apparatus and appliances.

"From testimony presented to this jury same shows a laxity and carelessness in city officials and their routine in transacting business which calls for revision by the Mayor and City Council, and we, the jury, demand immediate action on the following:

"Should have classified printed lists, to be filled out by an inspector, then signed by the head of the department, before any public building can secure permanent license and record kept thereof in duplicate carbon book.

"All fire-escapes should have separate passageways to the ground, without passing any openings in the walls. All scenery and paraphernalia of any kind kept on the stage should be absolutely fireproof.

"Asbestos curtains should be reinforced by steel curtains and held by steel cables. There should be two electric mains entering all places of amusement, one from the front with switchboard in box-office controlling entire auditorium and exits, and one on the stage to be used for theatrical purposes.

"All city officials and employees should familiarize themselves with city ordinances as they relate to their respective departments and pass a rigid and signed examination on same before they are given positions. This same rule should be made to apply to those holding office.

"All theaters and public places should be supplied with at least two city firemen, who shall be under direction of the fire department and paid for by the proprietors of said places.

"We recommend that the office and detail work of the fire department, as imposed on the fire marshal, be made a separate and distinct work from fire-fighting, as it is hardly to be expected of any fire marshal to give good and efficient service in both of these branches; also a police officer in full uniform detailed in and about said place at each and every performance."

An inspection of the plans traced from the architect's blue-prints and corrected by measurements to show the interior as constructed, and published exclusively in the January number of THE INLAND ARCHITECT, will suggest that this jury might have, with propriety, condemned the general plan of the theater which did not allow of any exits in a line with the aisles and opposite the stage, but on the whole its deductions were intelligent and conservative.

A HOLLOW-TILE FIREPROOFING TEST.

THE fires that occur in offices in fireproof structures are not usually noticed, because the ordinary furniture in an office will burn itself out or is extinguished before the doors can be burned through. But a fire occurred January 23 in the Masonic Temple, in Chicago, that for several reasons is notable.

The Masonic Temple is nineteen stories in height and when it was designed, some fifteen years ago, was the highest office building in the world. It is steel and hollow-tile construction according to ordinary methods. On the fifth floor a concern manufacturing X-ray machinery had a large shipping-room filled with boxes, excelsior and other combustible materials used in packing. This became ignited in some way and the result was a most spectacular fire, and as it occurred in the middle of the day, was witnessed by vast crowds. The fire burst through the windows and as the firemen felt that the building was secure and that nothing could be saved in the rooms where it occurred and that great damage would be done by water, it was allowed to burn for half an hour without any attempt being made to extinguish it. When this was done the interior showed the effect of the fire in blackened walls, consumed woodwork and some loss of plastering, but that was all. A close inspection directly after the fire was extinguished showed the structure remained intact, with no more evidence of damage than the interior of a furnace shows after the fires are drawn. This condition is taken as a matter of course by those who own hollow-tile-fireproofed buildings everywhere, for the greatest fires that have occurred in such structures, notably the Athletic Club fire in Chicago and the Exchange building in Minneapolis, both burned when in process of finishing and full of flooring and trimming lumber, with no doors to stop the drafts and spread of flames, have proved that our present method of fireproofing is absolutely indestructible as far as practical purposes require. The additional cost should be added to the general cost, as generally, as cost of brick for the walls, and besides the rebate on cost by a lessened insurance rate, the saving of a valuable building, as in the case of the Masonic Temple, justifies any difference that may exist between the best fireproofing methods and "slow-burning," "fire-resisting" or "mill-construction" methods that are resorted to to comply with laws that are too inadequate in their demands and too lax in their enforcement.

ASSOCIATION NOTES.

MONTANA STATE ASSOCIATION OF ARCHITECTS.

The State Association of Architects of Montana was organized December 15. Those who attended were: A. J. Gibson, of Missoula; T. C. Link, of Butte; J. F. Everett, of Missoula; C. S. Haire, of Helena; George Wesley Davis, of Butte; M. D. Kern, D. E. Swinehart and J. A. Fennell, of Butte; C. E. Bell and J. H. Kent, of Helena; J. H. Kennedy, of Missoula, and W. A. Donovan, of Great Falls. The following officers were elected: President, C. S. Haire, of Helena; treasurer, A. J. Gibson, of Missoula; secretary, J. F. Everett, of Missoula; trustees, M. D. Kern and Theodore C. Link, of Butte. The

association will meet annually, and the next meeting will be held in Butte.

ARCHITECTURAL LEAGUE OF NEW YORK.

The nineteenth annual exhibition of the Architectural League of New York will be held at the building of the American Fine Art Society, 215 West Fifty-seventh street, February 14-March 5. The exhibition will include architectural drawings in plan, elevation section, perspective and detail; drawings of decorative works, cartoons for stained glass, models of executed or proposed work, work executed in stone, wood, bronze, wrought iron, mosaic, glass and leather; sketches and paintings of decorative subjects. Gold and silver medals, the president's prize and the Henry O. Avery prize will be awarded.

The subject for the medal competition is "a recreation pier for an American seaport of the first class." The president's prize, which is open only to members of the league, for a stained glass window representing "The Annunciation." The Henry O. Avery prize for an electrolier, suitable for a newel post in the hall of a public library.

The jury which will pass on competitions is composed of Karl Bitter, Edwin H. Blashfield, Bryson Burroughs, Arnold W. Brunner, John M. Carrere, Kenyon Cox, Daniel C. French, Augustus St. Gaudens, John La Farge, Charles F. McKim, George B. Post and D. Everett Waide.

MOSAICS.

THE many friends of Reynolds Fisher, formerly of Patton & Fisher, of Chicago, will be pleased to know that after a brief experience on the Pacific coast he has returned east and is practicing at Detroit, under the firm name of Raseman & Fisher, architects.

THE Hilgartner Marble Company, of Carrara and Baltimore, which imports Carrara, Italian and all other foreign marbles, has opened offices in Chicago, in order that the business of the company in the West may be handled with greater facility. L. Hilgartner Daprich represents the company in Chicago.

THE January number "Book of the Royal Blue" has started the year with a new feature. Each number during the ensuing year will contain two pages of the characteristic work of two of the most prominent American press humorists, and consequently its readers may look forward to a variety of entertaining literature of this character in the future. It is also the endeavor of the publishers to present some beautiful picture, on the line of the Baltimore & Ohio Railroad, each month as a frontispiece, with a descriptive poem of some well-known author. The articles on the World's Fair at St. Louis are the best detailed descriptions published. The February number especially will be devoted to the beauties of the exposition from an architectural standpoint. A noticeable feature of the "Book of the Royal Blue" is that it stands alone among railroad publications in using its advertising pages exclusively to portray the merits of the Baltimore & Ohio System, and as much care is given to these pages to make them interesting as is given to the other features of the book.

OUR ILLUSTRATIONS.

Wisconsin Building, World's Fair, St. Louis.

Liberal Arts Building, World's Fair, St. Louis. Barnett, Haynes & Barnett, architects.

Stable for Jonathan Seltzer, Merion, Pennsylvania. Chester A. Kirk, architect, Philadelphia.

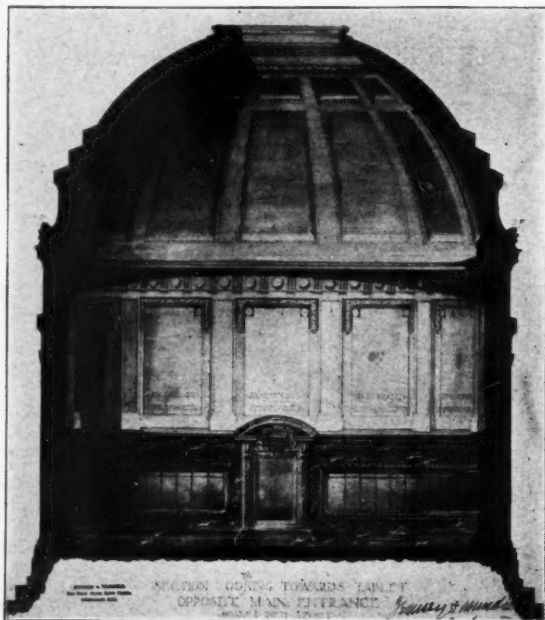
Residence of Frank N. Johnson, St. Louis, Missouri. Weber & Groves, architects. Stable also is shown.

Interior View, also Main Dining-room, Davenport's Restaurant, Spokane, Washington. Cutter & Malgren, architects.

Residence of A. R. Meyer, Kansas City, Mo. Van Brunt & Howe, architects. Two exterior views, View in Dining-room and View in Hall are shown.

Design of monument commemorating Illinois in the Vicksburg campaign of 1863, and her interest in the National Military Park established within the siege lines of that famous Confederate stronghold. Jenney & Mundie, architects. Designs for sculpture by Lorado Taft. In recent years the National Government has acquired the land on which the siege of Vicksburg took place in 1863, and has converted it into a National Military Park. The site of this park stretches from the Mississippi River on the north around the city of Vicksburg to the Warrenton Road on the south, and contains about thirteen hundred acres. It includes the lines maintained during the siege by both the Union and Confederate forces, and the contemplated improvements to be made by the National Government and the several States upon this reservation will convert it into one of the most attractive and picturesque parks in the world. The topography about the city of Vicksburg was not easy ground to fight over, but it has all the incidents and advantages necessary to the creation of a most beautiful and fascinating park. Under the Act of the General Assembly approved May 14, 1903, the commission appointed by Governor Yates for that purpose has adopted plans and details for the erection of a State monument, commemorative of all the soldiers and sailors of Illinois who were engaged in the military campaign and siege against Vicksburg. This State monument, together with smaller but appropriate monuments and markers, designating especially the locations and services of each regiment

of infantry, battery of artillery and troop of cavalry are to be erected within this National Military Park. The design and details for this State monument are for a sculptured temple of classic model, appropriately designed to meet the objects for which it is to be constructed. In a general way the conception of this temple to be dedicated by Illinois as a tribute to those of her citizen soldiery who participated in the campaign and siege of Vicksburg from March 29 to July 4, 1863, will recall the Pantheon and the Temple of Minerva Medica at Rome, classified by Ferguson as among the finest temples of the ancient world. The idea of a rotunda or circular temple was adopted by the commission, because it seemed most admirably suited for commemorating in enduring form the patriotic services and heroic achievements of the men from Illinois in that splendid campaign. In proportions the main part of this temple will be a little over 48 feet in diameter, surmounted by a hemispherical dome, the crown of which will be about 58 feet in height. It will face the south and the entrance to it will be under a Tetrastyle Doric portico 32 feet wide and projecting 14 feet on the south façade of the temple. The pediment of the portico is supported by four Doric columns



of the Roman style. The summit of the pediment of the portico will be crowned by the escutcheon of the United States, the wings of the eagle stretching upward to the height of 7 feet. The pediment will be decorated with sculptures consisting of the figure of a scribe supported by Fame and Valor, the whole representing History enrolling the names of the Illinois soldiers and sailors of that campaign, and recording their deeds as they march by. On the frieze under the center of the pediment will be inscribed in large raised letters the word "Illinois." Beneath the ceiling of the portico and upon the outside of the wall of the temple proper will be three marble tablets $3\frac{1}{2}$ by 7 feet in dimensions. Upon one of these tablets will be a bas-relief representing Richard Yates, the War Governor of Illinois, presenting Citizen Ulysses S. Grant his commission as Colonel of the 21st Illinois Infantry Volunteers. Upon another—the central one—will be represented in bas-relief the gunboats running the batteries at Vicksburg on the night of April 16, 1863, and on the other will be a scene representing the surrender of Vicksburg by General Pemberton to General Grant, under the tree which stood not far distant from the site upon which this temple will be located. The main external cornice of the temple proper will be surmounted by a cresting, consisting of eagles interwoven with shields, and suggestive both of attack and defense. At either side of the broad flight of steps leading up to the portico from the Jackson Highway to the terrace from which the temple will rise will be placed two bronze groups, one representing War and the other Peace. This temple will be lighted from the top only, by an opening or eye 11 feet in diameter at the apex of the dome. Around the exterior of the dome, at proper height, will be engraved in large letters, beginning on the right, this sentiment from Lincoln's second inaugural, "With malice toward none, with charity for all," and ending on the left hand with the last phrase in General Grant's farewell order to the army, "Let us have peace." The entire structure will be built either of white granite or marble, and ornamented with bronze, in fulfillment of the statute which prescribed the kind of material which shall enter into this monument. The wall space of the interior along its entire circumference to the height of about 7 feet from the floor will be ornamented with a chastely designed frame consisting of bronze panels between a base and cornice of green marble. These panels will be sufficient in number and size to contain the names of all of the men from Illinois, from the colonels of regiments down

to and including all enlisted men according to the organizations of infantry, artillery and cavalry to which they belonged, respectively. There will be more than sixty of such bronze tablets, bearing the names in bronze letters large enough to be easily legible, of every officer and enlisted man from Illinois who participated in that campaign. Illinois was represented in the Vicksburg campaign between the 29th of March and the 4th of July, 1863, by fifty-five infantry regiments, fifteen batteries of artillery and ten regiments, squadrons or troops of cavalry, making eighty distinct military organizations from Illinois to be recorded upon such bronze tablets within the walls of this temple. It is now estimated that these bronze panels will contain the names of more than thirty-five thousand soldiers and sailors from Illinois. The entrance to the rotunda of the temple through its southern wall will be $6\frac{1}{2}$ feet wide, but there will be no door. Directly opposite and facing the entrance will be a larger bronze panel, upon which will be inscribed in appropriate phrase the dedication by Illinois of this temple to the memory of her sons who participated in that historic campaign and siege. Immediately above this larger panel will be inscribed first, the name of Abraham Lincoln, and immediately underneath the name of Richard Yates, War Governor of Illinois. On the right of these two imperishable names will be that of Ulysses S. Grant, the nation's illustrious hero, *tete d'armee*, and immediately below the name of John A. Rawlins. To the left of Lincoln's name will be that of John A. Logan, and underneath the name of John A. Logan will be that of John McArthur. And in this way from right to left will be inscribed the names of the twelve general officers from this State who commanded divisions in that campaign. Below the names of the general officers from Illinois will be inscribed the names of the colonels from this State who commanded brigades. The entire interior decoration, with the inscriptions, will be not only highly artistic in design, but unique in the construction of monuments for such purpose. The exact site of this memorial is upon a small knoll on the north side of the Jackson Highway leading from Vicksburg to Jackson, Mississippi, and about four hundred feet southwesterly of the Shirley residence, which, during the siege and since, has been known as the White House. The spot is one of the most conspicuous within the limits of the Military Park, and was the point upon which was located during the siege the famous McAllister (Illinois) battery. It is within about sixty rods of what was one of the strongest fortresses of the Confederate stronghold, which has since the siege been known as the Third Louisiana redan, but was designated by most of the Union soldiers at the time as Fort Hill. Logan's division of the 17th Army Corps was strung along this position, and the most famous sap run by the soldiers in Logan's command passes the knoll upon which the State of Illinois will erect this memorial.

Photogravure Plate: Residence of Jonathan Seltzer, Merion, Pennsylvania. Chester A. Kirk, architect, Philadelphia.

PHOTOGRAVURE PLATES.

Issued only with the Photogravure Edition.

Residence, New York city.
Entrance Detail, Van Cortlandt building, New York city.
Jewish Synagogue, New York city. George F. Pehlman, architect.
Residence, Fifth avenue, New York. Van Vleck & Goldsmith, architects.
Standard Coach Horse building, New York city. Ludlow & Valentine, architects.
Entrance Detail, Commonwealth building, Philadelphia. John H. Windrim, architect.
Monument, New York city, to the memory of Heinrich Heine, German poet. E. Herter, Berlin, sculptor.
Residence of A. R. Meyer, Kansas City, Missouri. Van Brunt & Howe, architects. Two exterior views, View in Dining-room and View in Hall, are shown.

NEW PUBLICATIONS.

THE BEST MADE BETTER.—The New Edition of Webster's International Dictionary, recently issued, brings Webster again abreast of the growth of the language and again confirms it in its position as the One Great Standard Authority. A decade has passed since the International was first published, and the years have been full of changes and growth in life and knowledge and achievement; changes that have been reflected in the language and that must now be registered in the dictionary. A supplement of additional words has therefore been added to the International to include the thousands of new words that have come into literary use, the old words that have changed their meanings, the obsolete words that have been revived. The same ideals and principles, so thoroughly approved by experience, which were followed in the body of the book, governed the work of the supplement. There has been the same survey and scrutiny of a great mass of words, the same careful selection of such as merit a place of permanence, and the same studious and thorough explication of meanings in the forms most easily understood. The consulter's needs for a reliable and usable guide to the proper use of English words have been deliberately preferred to the ability to boast of a huge, unwieldy vocabulary. The best scholarship and expert knowledge in the country have been employed on the supplement to make it equal in every respect to the main vocabulary.



Oh! Yes I stop off at -
WASHINGTON
 The B. O. grant me that -
 privilege on through -
 tickets. It's just a top off -
 to the beautiful Country -
 and Mountains along the -
 B. O. - before taking the -
 five hour ride to the Metro-
 polis.
 Traveling over the B. O. is -
 becoming more popular -
 every day - Three trains -
 daily - Solid Vestibule Pullmans.
 For information regarding -
 sleeping car reservations, tickets, etc.,
 call on W. W. Picking D.P.A.
 244 Clark St. Chicago.
 D. K. Martin Mgr. of Pass. Traffic
 BALTIMORE.
 E. N. Austin Genl. Pass. Agt.
 CHICAGO.



THE J. W. REEDY ELEVATOR CO.
 Passenger and Freight
ELEVATORS.

83 to 91 Illinois Street,
 CHICAGO.

31-33 Tenth Avenue,
 NEW YORK CITY.

FOR INFORMATION ABOUT
U. S. MAIL CHUTES

WHICH ARE
 A necessity in office buildings and hotels,
 write to the sole makers,

THE CUTLER M'F'G CO., Rochester, N. Y.
 PATENTED. AUTHORIZED.

THE NATIONAL
 WOOD FLOOR CO.

Manufacturers
 of

Parquet Floors
 National Hard Finish
 National Wax Polish

Established 1869

186 FIFTH AVENUE AND
 10 W. 23d STREET, NEW YORK

"Big Four" Route.

CHICAGO

TO

INDIANAPOLIS,
 CINCINNATI,
 LOUISVILLE.

**SOUTH and
 SOUTHEAST**

THE SCENIC LINE TO

Hot Springs, Va., and
 Washington, D. C.

Via the

Chesapeake & Ohio Ry.

J. C. TUCKER, G. N. A.

238 Clark Street,

CHICAGO.

"WHATEVER
 IS WORTH
 DOING AT ALL
 IS WORTH
 DOING WELL."

Telephones
 Harrison 4230-4231.

.. Observe typography of THIS JOURNAL as a fair specimen of our grade of work ..

THE HENRY O. SHEPARD COMPANY

120-130
 Sherman St.
 CHICAGO.

**Printers, Embossers
 Blank Book Makers**

We do
 all kinds of
 Printing and
 Binding.
 Rush Work a
 Specialty.

Please mention THE INLAND ARCHITECT when corresponding with Advertisers.

BUILD UPON WATER



The handsome modern hotels at French Lick and West Baden were built to accommodate the increasing thousands that go to take the wonderful curative waters of these twin resorts.

For toning the system and curing bowel, kidney, stomach and liver affections, the natural waters of these springs are unequaled by any in the world.

There are ten of these medicinal springs having different degrees of strength and different properties.

In addition to the health-giving waters these resorts have climatic and scenic advantages possessed by no others in Europe or America—splendidly wooded hills, fine scenery, good roads for rides, drives or walks, and, above all, pure bracing air that is a tonic in itself.

In the Highlands of
Southern Indiana on the

MONON ROUTE

Frequent Day and Night
Trains

For Booklets and full information in regard to trains, routes, hotel rates, etc., write to the General Passenger Agent of the Monon Route.

W. H. McDOEL,
Pres. and Gen. Manager.

FRANK J. REED,
Gen. Pass. Agent, Chicago.

CHAS. H. ROCKWELL,
Traffic Manager.

National Fire Proofing Company

STANDARD METHODS OF

HOLLOW AND POROUS TILE FIREPROOFING

OFFICES

FRICK BUILDING	- - - - -	PITTSBURGH
170 BROADWAY	- - - - -	NEW YORK
NORTH AMERICAN BUILDING	- - - - -	PHILADELPHIA
TREMONT BUILDING	- - - - -	BOSTON
HARTFORD BUILDING	- - - - -	CHICAGO

We own patents for the Johnson System of Fireproofing. Residences and other buildings can be made fireproof without the use of steel.

LET US GIVE YOU ESTIMATES

PIONEER

FIRE-PROOFING COMPANY

1515 Marquette Building

CHICAGO

CONTRACTORS FOR FIRE-PROOFING
OF BUILDINGS

MANUFACTURERS OF CLAY PRODUCTS

LOUIS J. MILLET

(Successor to HEALY & MILLET)

Interior Decorator

151 MICHIGAN AVE., CHICAGO

Leaded Glass. Glass Mosaic. Frescoing

CRANE FITTINGS

ESTABLISHED 1855

Please mention THE INLAND ARCHITECT when corresponding with Advertisers.

Mr. Architect: REASONS WHY YOU SHOULD USE
Dexter Brothers'
English Shingle Stains

BECAUSE they will outwear paint or any other stain.

BECAUSE they preserve the shingle.

BECAUSE they do not give a painted effect to the shingle.

BECAUSE they do not change as other stains do.

BECAUSE they have no disagreeable odor.

BECAUSE they are used on the best work from Maine to California.

BECAUSE they are used by people who want the best of everything.

Exclusively used on the shingled country houses of *Mr. George Vanderbilt* at Biltmore, *Mr. J. Pierpont Morgan*, Adirondacks, *Hon. Wm. C. Whitney*, Westbury, L. I., *Mr. Thomas W. Lawson*, Egypt, Mass.

Manufactured by

DEXTER BROTHERS COMPANY

103-105-107 Broad Street

H. M. HOOKER CO., Agents
 57 W. Randolph Street
 CHICAGO

BOSTON

W. S. HUESTON, Agent
 24 East 22d Street
 NEW YORK



Please mention THE INLAND ARCHITECT when corresponding with Advertisers.

ESTABLISHED 1873

INCORPORATED 1890



71 & 73 Randolph Street.

MANUFACTURERS, WHOLESALE AND RETAIL DEALERS

Builders' Hardware

ART METAL-WORK OF ALL KINDS.

Cooling Rooms.

Mechanics' Tools.

Table and Pocket Cutlery.

Our selection comprises THE BEST from all the leading factories, as well as our own, and our heavy purchases enable us to offer you these goods at prices which can not fail to please.

We have many specialties which we manufacture and control which can not be found anywhere else.

Orr & Lockett Hardware Co.

71 & 73 RANDOLPH STREET.

Telephone, Central 551.



The Yale Lock

with Paracentric Key affords the highest standard of security, and is made in hundreds of styles and sizes, adapted to almost every possible use, from a jewel-case to a prison door.

Little Brochures, "What is a Genuine Yale Lock," "Yale Night Latches," "Artist and Artisan," etc., will be sent on request.

The
YALE & TOWNE
Mfg. Company.

CHICAGO OFFICE:
131 Wabash Avenue.



IF YOU



SPECIFY

SAMSON SPOT CORD



You can tell at a glance that no other Sash Cord is substituted. It is warranted to be of the best cotton stock, smooth finish and perfect braid.

SAMSON CORDAGE WORKS
BOSTON, MASS.

Enamel Finish that is made of inferior material will always look cheap and mar the beauty of the finest drawing-room. The best materials that can be obtained are used in the manufacture of our

Structural Enamels

THEY ALWAYS GIVE SATISFACTION



EDWARD SMITH & CO.

Varnish Makers and
Color Grinders

45 Broadway, New York.

59 Market Street, Chicago.

Pittsburg Car

ON

The Lake Shore Limited

A Through Pullman Sleeper is now in daily service between Chicago and Pittsburg on the LAKE SHORE LIMITED, affording Pittsburg travel all of the luxurious accommodations of this famous train.

Leaves Chicago
5.30 p. m.

Arrives Pittsburg
6.35 a. m.

City Ticket Office, 180 Clark St.
CHICAGO

A. J. SMITH
Gen'l Pass'r and Ticket Agt.
CLEVELAND

C. F. DALY
Chief Ass't Gen'l Pass'r Agt.
CHICAGO

Please mention THE INLAND ARCHITECT when corresponding with Advertisers.