

Furnished by
Henry Pastor
Memorial Fund.

Public Library
RECEIVED
FEB 25 1907
Washington, D.C.

The AMERICAN ARCHITECT AND BUILDING NEWS

Regular Edition

Vol. XCI.

FEBRUARY 23, 1907.

No. 1626.

EDITORIAL SUMMARY:

Pages 81-82

A California Law Compelling the Employment of an Architect for Every Building—The Insincerity of the License Movement—Minnesota Threatened with a License Law—Death of Albert W. Maas, Architect—A Height-limit Law to Protect the Capitol at Hartford, Conn.—“Tainted” Money and the Oversensitive Official—An Expert's Fee.

ARCHITECTURAL DESIGN IN AMERICA.....	83
THE SANITARY FEATURES OF MARKETS AND ABATTOIRS.—IV.....	85
COMMUNICATION	87
Competition for Concrete Suburban Houses.	
NOTES AND CLIPPINGS.....	88
SOCIETIES, PERSONAL MENTION, BUILDING NEWS, ETC.	

PLATES:

House of G. L. Williams, Esq., Delaware Ave., Buffalo, N. Y.:
Two Plates—Market Building and Market Square, Pullman, Ill.:
Two Plates—House of Mrs. James Downs, Rochester, N. Y.—
House of Kendall B. Castle, Esq., Rochester, N. Y.—Plans of the
Foregoing.

ADDITIONAL PLATE (International Edition):

Portico: House of G. L. Williams, Esq., Buffalo, N. Y.

12 WEST 40TH STREET

NEW YORK

LOOMIS FILTERS

Established 1880.
Improved System. Simple and Effective.
LOOMIS-MANNING FILTER CO.
Main Office: 828 Land Title Bldg., Broad
and Chestnut Streets, Philadelphia.
Boston. New York. Baltimore.
Washington.

ELECTRIC SIGNALS

FOR
PASSENGER ELEVATORS
ELEVATOR SUPPLY & REPAIR CO.
136 Liberty St. 34 W. Monroe St.
NEW YORK CHICAGO

THE ROBERT C. FISHER COMPANY

Successors to Fisher & Bird
MARBLE & GRANITE WORKS
139th-140th Sts.—Locust Ave. and East
River. Established 1830. New York.



OTIS ELEVATOR COMPANY
New York Office: 17 Battery Place

"Norman Monuments of Palermo"

BY ARNE DEHLI.
Illustrated with 50 Plates, 13"x17".
Price, bound, \$10.00. Unbound, \$9.00.
The American Architect, Publishers.

RENAISSANCE DOORWAYS

RED CLOTH, GILT TOPS
Plates (104), each 10 x 14 inches.

Price, \$7.50

THE AMERICAN ARCHITECT
12 WEST FORTIETH STREET
NEW YORK.

BERGER'S "CLASSIK" STEEL CEILINGS

EXCLUSIVE IN STYLE.



Write us for Catalogue and Prices.

WE also make all kinds of sheet metal
roofing and siding; Cornices, Finials,
Crestings, Skylights, Metal Shingles,
Metal Lath, Multiplex Plate for fireproof
floors and roofs; Steel Office and Vault
Equipment, etc.

Send us your plans for estimate.

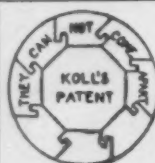
THE BERGER MFG. CO.

AA&BN 2-5 CANTON, OHIO.

"RENAISSANCE FIREPLACES."

40 Gelatine Plates, on bond paper, 9"x11".
In Envelope, Price, \$5.00.

THE AMERICAN ARCHITECT, Publishers.



Send for
Catalogue G19

KOLL'S
PATENT LOCK JOINT
STAVED COLUMNS
are particularly well adapted
for out-door use. Made in all
sizes from 5 in. to 42 in.
diameter and proportionate
lengths.
Hartmann Bros. Mfg. Co.
Mt. Vernon, N. Y., U. S. A.
N. Y. Office, 1123 Broadway.
Western Factory, H. Sanders
Co., 77-85 Weed St., Chicago.

ATLAS PORTLAND CEMENT

The Standard American Brand. Always Uniform

THE ATLAS PORTLAND CEMENT COMPANY, 30 BROAD STREET, NEW YORK

Alphabetical List of Advertisers

For CLASSIFIED LIST, See Page xviii.

A Aisen Cement.xviii American School of Correspondence.... American Luxfer Prism Co.ix American Mason Safety Tread Co.xvi American Rolling Mill Co.xvii American Sheet & Tin Plate Co.v Associated Expanded Metal Co.xvi Atlas Portland Cement Co.xii	Emmel, Charles.xiv Engineering Agency. Expanded Metal and Corrugated Bar Co.xii F Favor, Ruhl & Co.xiv Fisher Co., Robert C.ii French & Co., Samuel H.viii Frink, I. P.x	K Keasbey & Mattison Co.x Kewanee Water Supply Co.v L Lane, John.iii Loomis-Manning Filter Co.ii Lufkin Rule Co.xvi M Mass. Institute of Technology.iv Miller & Bro., James A.viii Mittineague Paper Co.iii Mullins Co., W. H.xix	Smith Co., H. B.xvii Society of Beaux-Arts Architects.iv Soltmann, E. G.xvii Standard Sanitary Mfg. Co.vi Stanley Works.viii T Taylor, J. W.xvi Technical Supply Co.xxvii Thomas & Smith.xx Thorn Co., J. S.viii Thorp Fire Proof Door Co.x Troy Laundry Machinery Co.xx Trussed Concrete Steel Co.vii
B Barber Asphalt Paving Co.xiii Batterson & Biele.iii Berger Mfg. Co.ii Bird & Sons, F. W.xv Burt Mfg. Co.v Butcher Polish Co.viii	G Gabriel Concrete Steel Co.xiii Genasco Roofing Co.xiii General Compressed Air and Vacuum Machinery Co.iii Gilbreth, Frank B.liv Globe Ventilator Co.xviii Guastavino, R. Co.vii Gurney Heater Mfg. Co.xx	N National Fireproofing Co.vii National Lead Co.xiii Neuchatel Asphalt Co.x New York Belting & Packing Co.xi New York Blower Co.x Northwestern Terra Cotta Co.xv	U U. S. Mail Chute Equipment Co.xxv U. S. Mineral Wool Co.viii Universal Portland Cement Co.xv, xx University of Illinois.iv University of Michigan.iv University of Pennsylvania.iv
C Campbell, Walter M.xvi Cement Age.xiii Chappell Furnace Co.xii Clinton Wire Cloth Co.xix Corrugated Concrete Pile Co.x Cutler Mfg. Co.ix	H Hartmann Bros. Mfg. Co.ii Harvard University.iv Hayes, Geo.viii Holophane Glass Co.xvi	O Okonite Co (Ltd.)iv Otis Elevator Co.ii P Pennsylvania Rubber Co.ix Plastic Relief Mfg. Co.xix	V Vaile & Young.xx W Washington University.iv Weber Steel Concrete Chimney Co.xix Wight, W. N., & Co.xii Winslow Bros. Co., The.xv Wirt, F. B.xvi Wolff Mfg. Co.xix
D Dadmun, Leon B.xix Deane, E. Eldon.xvi Dixon Crucible Co., Jos.xviii	I Information Bureau of Tile Industry. xi	R Raymond Concrete Pile Co.x Rider-Ericsson Engine Co.xvi	Y Yale & Towne Mfg. Co.x
E Elevator Supply and Repair Co.ii	J Jackson Co., Wm. H.xx Jenkins Bros.x Jones, T. W.viii	S Samson Cordage Worksx Sloane, W. & J.xi	

BATTERSON & EISELE



CARRERE & HASTINGS, Architects

IMPORTERS AND
WORKERS OF

Marble,
Onyx and
Granite

Roman and Venetian Mosaics
for Floors, Mantels,
Etc.



Office :

TIMES BUILDING, NEW YORK.

Works :

EDGEWATER, NEW JERSEY.

Strathmore Detail Paper

Manufactured from the best quality of pure rag stock adapted to this class of paper and it is guaranteed to be equal to the requirements of its several purposes.

The sheet is of the same thickness and texture throughout its entire area and contains no lumps or grit. The drawing surface is alike perfect for pen, pencil or crayon and will work as well after erasure as before.

It is manufactured in White and Buff in 30, 36, 40 and 48 in. rolls and sold by most responsible dealers.

A request of your dealer or ourselves will bring a sample book showing the paper, which also includes samples of our STRATHMORE ARTISTS Papers and Boards for all media.

Mittineague Paper Company

Mittineague, Massachusetts, U. S. A.
Makers of "Strathmore Quality" Papers

Special Extra Numbers to International Studio

Limited Editions

No Reprints

The publishers reserve the right to advance price after the date of publication

Paper Wrappers, \$2.50 net; Post, 25 cts. Cloth, \$3.00 net; post, 35 cts.

English Country Cottages

Studio Year Book of Decorative Art, 1907

A Guide to the Artistic Furnishing of the House.
Many Hundreds of Illustrations, including
Numerous Colored Plates

"Full of suggestions and admirable hints."
THE HOUSE BEAUTIFUL

The Art Revival in Austria

MODERN PAINTING ARCHITECTURAL REVIVAL
MODERN PLASTIC ART DECORATIVE ART
220 Illustrations, 18 Special Color and
Photogravure Plates

JOHN LANE COMPANY, NEW YORK

THE BODLEY HEAD

67 FIFTH AVENUE



UNIVERSITY OF PENNSYLVANIA SCHOOL OF ARCHITECTURE

FOUR-YEAR COURSE. (*Degree B. S. in Arch.*) (Architectural engineering may be taken in lieu of advanced design, etc.)

GRADUATE YEAR. (*Degree M. S. in Arch.*) (Allowing specialization in design or in architectural engineering, etc.)

SPECIAL COURSE OF TWO YEARS. (*Certificate.*) (For qualified draughtsmen; affording option in architectural engineering.)

COMBINED COURSES IN ARTS AND ARCHITECTURE, by which A. B. and B. S. in Arch. may be taken in six years.

COLLEGE GRADUATES granted advanced standing.

SUMMER COURSES in elementary and general subjects through which advanced standing may be secured.

For full information address: DR. J. H. PENNIMAN, Dean, College Hall, University of Pennsylvania, Philadelphia, Pa.

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

DEPARTMENT OF ARCHITECTURE

Options in *Architectural Engineering* and *Landscape Architecture*.

College graduates and draughtsmen admitted as special students.

H. W. TYLER, Secretary,
Mass. Institute of Technology, Boston, Mass.

WASHINGTON UNIVERSITY St. Louis, Mo.

DEPARTMENT OF ARCHITECTURE

offers a professional four-year course in Architecture. Admission by examination or by certificate or diploma from other schools and colleges. Draughtsmen are admitted as special students.

HARVARD UNIVERSITY

The Graduate School of Applied Science and The Lawrence Scientific School

offer graduate and undergraduate courses in Civil, Mechanical, Electrical, Mining and Metallurgical Engineering, Architecture, Landscape Architecture, Forestry, Physics, Chemistry, Biology, and Geology.

For further information, address W. C. SABINE,
15 University Hall, Cambridge, Mass.

UNIVERSITY OF MICHIGAN

ANN ARBOR, MICH.

DEPARTMENT OF ARCHITECTURE.

Four-year course in Architecture and in Architectural Engineering. Draftsmen and others adequately prepared are admitted as special students. For Bulletin describing work, address Dean of Department of Engineering.

THE SOCIETY OF BEAUX-ARTS ARCHITECTS

has established

A FREE COURSE OF STUDY

open to draughtsmen and students of any city, modeled on the general plan pursued at the Ecole des Beaux-Arts in Paris, and comprising frequent problems in Orders, Design, Archaeology, etc.

For information apply to the Secretary of the Committee on Education, 3 East 33d St., New York City.

"MONUMENTAL STAIRCASES."

40 Gelatine Plates, on bond paper, 9" x 11".

In Envelope. Price, \$5.00.

THE AMERICAN ARCHITECT, Publishers.

THE GEORGIAN PERIOD

PRICE, \$60.00.

"The most important work on architecture yet produced in America."—*Nation*.

THE AMERICAN ARCHITECT,

12 WEST FORTIETH ST.,

NEW YORK

UNIVERSITY OF ILLINOIS

Four-year professional courses in Architecture, in Architectural Engineering and in Architectural Decoration. Special courses for draftsmen and constructors. Excellent library and equipment. University fees nominal.

Department of Architecture.

W. L. PILLSBURY, Registrar, URBANA, ILL.

OKONITE

INSULATED ELECTRIC LIGHT WIRES

Are pronounced by leading Architects to be **SAFE, DURABLE** and **EASILY ADJUSTED** for the inside wiring of **PUBLIC & PRIVATE BUILDINGS**

WILLARD L. CANDLER, Managers.
H. DURANT CREEVER,
Geo. T. MANSON, Gen'l Supt. W. H. HODGINS, Sec'y.



REG. U.S. PATENT OFFICE.

Candee Weatherproof Wires

Okonite Waterproof Tape

Manson Protecting Tape

SOLE MANUFACTURERS

THE OKONITE CO., Ltd.

253 Broadway, New York

COMPETITIONS

BOSTON, MASS.—Press reports state that competitive plans are to be received by the Consumptive Hospital Trustees for the consumptive hospital, which is to be erected at Mattapan. Cost is not to exceed \$85,000.

YOUNGSTOWN, O.—Press reports state that the Mahoning County Court House is to be erected at Market and Front Streets, and, it is stated, that competitive plans are to be asked for the building.

BUILDING NEWS.

(The editors greatly desire to receive information from the smaller and outlying towns as well as from the larger cities.)

AKRON, OHIO.—The M. O'Neil Company, it is stated, will erect a new six-story building on South Howard Street, to cost about \$100,000.

ALBANY, N. Y.—Reports state that the Assembly has passed a bill appropriating \$362,500 for erection of a new State Hospital.

ALTUS, O. T.—The City National Bank, recently organized, has purchased a site on which to erect a building. A. C. Fagin is president.

AMES, IOWA.—The members of the Episcopal Church, it is stated, are arranging to erect a \$35,000 edifice.

AMITE, LA.—Press reports state that plans are being prepared for a new courthouse to be erected at a cost of \$80,000. Address H. N. Noyes.

ANN ARBOR, MICH.—Plans are now being drawn for a new dental building to be erected on the old Winchell property. The building will cost about \$80,000, and will be modern in every respect. The major portion of the building will be given up for a large auditorium, with a seating capacity of 5,000. Nearly \$300,000 on new buildings will be expended on the campus of the University of Michigan.

BALTIMORE, MD.—It is reported that Edward H. Glidden, architect, Glenn Building, St. Paul near Fayette Street, will prepare plans and specifications for five-story apartment-house to be erected at southwest corner Cathedral and Chase Streets by C. Warner Stork, Hotel Altamount.

The Maryland Pythian Building Association, with a capital of \$150,000, will erect a castle hall for the Grand Lodge of the Knights of Pythias. Address John J. Thomas, president.

BATTLE CREEK, MICH.—Fred. Wells, Secretary Board of Education, writes that preliminary plans for the proposed high school, which will cost about \$150,000, will be ready about February 21.

BEATRICE, NEB.—It is stated that plans are being prepared for an addition to the government building by the Commercial Club. Cost, \$80,000.

BEAUMONT, TEXAS.—H. A. Peristein is having plans prepared for a three-story store building, 60x112 feet, to be occupied by S. H. Kress & Co., New York, N. Y. Estimated cost, \$80,000.

BEAVERDAM, WIS.—E. Brielmeier & Sons

Co., of Milwaukee, it is stated, are preparing plans for the proposed edifice for St. Patrick's Congregation. Estimated cost to be \$45,000.

BELVIDERE, ILL.—Bids will be asked shortly for the new federal building, to cost \$50,000.

BERKELEY, CAL.—The Directors of the University Savings Bank intend erecting an eight-story building at Shattuck Avenue and Center Street, to cost \$200,000.

BINGHAMTON, N. Y.—The management of the Fowler Hotel (J. V. Fowler, owner), it is reported, propose erecting a six-story hotel.

Reports state that the York State Telephone Co. will erect a three-story fireproof building at 40 Henry Street, to cost about \$100,000.

BIRMINGHAM, ALA.—Prowell Hardware Co., it is said, will erect a seven-story building, 55x187 feet, with about 80,000 square feet of floor space; mill construction; equipped with sprinkler system.

The Birmingham Terminal Co., it is reported, has authorized an issue of \$3,000,000 of bonds for the new passenger terminal station. Half the amount will be used for construction now under way and the rest for future use.

Plans are being considered for the erection of a court-house, at a cost of \$450,000.

BIRMINGHAM, MICH.—Architect Albert Kahn, 1117 Union Trust Building, Detroit, Mich., is preparing plans and will take figures about March 1 for a residence at Birmingham for George G. Booth, 65 Shelby



Notice Sliding Sleeve Damper. Patented.

One Won 48 More

Now comes the Florida East Coast Railway Company, to prove our contention that the unassailable superiority of the

Burt Ventilator

is proven beyond question by the repeat orders.

In February, 1906, the Florida Company purchased a single Burt Ventilator for trial. They had previously tested practically all the ventilators on the market. They have just sent us an order for 48 more Burt Ventilators, which tells its own story.

Our 64-page general catalogue contains some further particulars that will be of interest to all who use ventilators. Write for it today. Address

The Burt Mfg. Co., 550 Main St., Akron, Ohio.

Largest Manufacturers of Oil Filters and Exhaust Heads in the World.



Notice Sliding Sleeve Damper. Patented.

Street, Detroit. To be a two-story and basement, 100x65 feet, of fireproof construction, brick, reinforced concrete, tile roof, hot water heating, combination lighting, best open plumbing, mosaic tile, plate and art glass, choice hardwoods, hard plaster, etc. Cost, \$50,000.

CAMBRIDGE, MASS.—Reports state that a library, to cost \$75,000, and a dormitory, will be erected at Radcliffe College.

CAMDEN, S. C.—Architect Arthur Gilbert, Racine, Wis., is preparing plans for a \$75,000 office and store building at Camden, S. C., for Frank K. Bull, of Racine.

CANTON, O.—It is reported that a new theatre will be erected on Third and Piedmont Streets, to cost about \$50,000. Address H. S. Vail, of Marion.

CAPE HENRY, VA.—Cape Henry Beach Company will erect a \$50,000 hotel, to be known as the John Smith Inn. Plans for the building have been prepared by John K. Peebles, Norfolk, Va. W. M. Rettew, of Norfolk, Va., is the chairman of the building committee.

CARLISLE, PA.—Bids are asked by the Commissioner of Indian Affairs, Washington, D. C., until 2 P. M., March 8, for furnishing and delivering the necessary materials and labor required to construct and complete a hospital building, with plumbing, steam heat and electric lighting, at the Carlisle School, Pa. For further information apply to Major William A. Mercer, Superintendent, Carlisle, Pa.

CARTHAGE, ILL.—J. E. Mills, architect, it is said, has been employed by the Board of Supervisors of Hancock County to prepare plans for the proposed \$125,000 court-house. James W. Westfall is Clerk.

CENTRAL FALLS, R. I.—The Bryan-Marsh Company, Fulton and Greenwich Streets, New York, N. Y., will erect an incandescent plant at Central Falls at a cost of about \$150,000. The power plant will have a capacity of 1,000 horsepower.

CHAPEL HILL, N. C.—Frank P. Milburn & Co., architects, Washington, D. C., are preparing plans for a new infirmary for the University of North Carolina, Francis P. Venable, President. Bids will be called for as soon as plans are finished.

CHARLOTTE, MICH.—Architect Joseph C. Llewellyn, 1516 First National Bank Building, Chicago, has prepared plans for a banking house for the First National Bank of Charlotte; to be of Bedford limestone and marble, with fire and burglar proof vault and finest bank fixtures. J. M. C. Smith, president.

DALLAS, TEX.—Aleander Sanger, of Sanger Brothers Goods Company, it is stated, will erect a six-story building.

DAYTON, O.—Bids will be received until March 7 by T. J. Kaufman Company, auditor, for \$250,000 Memorial Building bonds.

William Earl Russ, of Dayton, it is reported, has been selected as architect, and Albert Pretzinger as consulting architect, for the County Memorial Building, which it is proposed erecting on First Street. Charles Wuichet is chairman of the Memorial Building Committee.

DENVER, COL.—The trustees of the St. Mary R. C. Academy will erect a building at Fourteenth and Pennsylvania Avenues, to cost, including equipment, about \$200,000.

A four-story hotel will be erected at Fifteenth Street and Cleveland Place at a cost of \$100,000. W. H. Garner and business associates have secured a ninety-nine

years' lease on four lots and active work will be started immediately on the new hotel. The ground floor will be given over to twelve storerooms. The three upper floors will be divided into 100 rooms, each finished in hardwood and equipped with all modern improvements. The plans call for a summer garden on the roof, where a hardwood floor will offer facilities for dancing parties. The main entrance will open from Fifteenth Street into a marble and tile-finished vestibule and office.

EL PASO, TEX.—Charles P. O'Fallon and William G. O'Fallon, representing St. Louis parties, have purchased site on which a six-story hotel, 260x260 feet, will be erected.

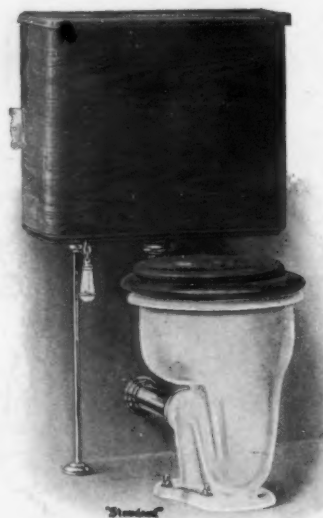
FT. SCOTT, KAN.—It is reported that a \$75,000 depot is to be erected here by the 'Frisco System (H. F. Clark, Superintendent Western Division, Neodesha, Kan.)

GADSDEN, ALA.—Dr. E. S. Jones announced last week that he would build a four-story modern hotel on Broad Street, between Fifth and Sixth Streets. The building is to be of brick and stone and will be handsomely finished throughout, with every modern convenience, and will be ready for business early in the fall. A. D. Simpson has plans.

GREELEY, COL.—B. A. Canfield is reported interested in the erection of a \$200,000 sanitarium.

GREEN CASTLE, IND.—The trustees of De Pauw University have selected the site for a new library building, and bids will be in order soon. The estimated cost is to be \$100,000.

GREENSBORO, N. C.—Improvements are to be made to the Guilford Hotel, according to reports, at a cost of about \$75,000.



"Standard" Plate P-851

PARAGON "STANDARD" Enameled Washout Closet—adapted for work requiring least possible outlay, but demanding a thoroughly sanitary and effective fixture. Enameled inside and outside with 2-inch Brass Flush Connection and Improved Roll-Top flushing rim. Woods and fittings Quartered Oak, Cherry, Walnut, High Dutch Oak, English Oak, Ox Blood, Bird's Eye Maple, White Enamel and Mahogany.

"Standard" FIXTURES GIVE PERMANENT SATISFACTION



WHEN an architect's client finds that **"Standard"** Porcelain Enameled Fixtures have been specified for his property he is pleased, because he has been taught by actual experiences to regard **"Standard"** Fixtures as the most beautiful, the most sanitary and the most satisfactory equipment that he can secure. The Architect on the other hand knows that his customer has the right impression of "Standard" fixtures and that the test of use will increase his satisfaction.

Standard Sanitary Mfg. Co.
PITTSBURGH, PA.

HAMILTON, O.—It is reported that plans have been prepared for the remodeling of the infirmary. Cost, \$55,000.

HARRISBURG, PA.—The erection of a State Tuberculosis Hospital, at a cost of \$100,000, is reported under consideration. A site about five miles from Williamsport is under consideration. Dr. S. P. Hakes may be able to give further information.

HOUSTON, TEX.—Sanguinett, Statts & Seuter, First National Bank Building, it is reported, have prepared plans for an eight-story steel fireproof building which is to be erected by Allen Paul at Preston Avenue and Fannin Street, at an approximate cost of \$100,000.

Reports state that S. F. Carter will erect a fifteen-story office-building here.

HUBBARD CITY, TEX.—M. Carroll and associates, it is said, are organizing a company with \$150,000 capital stock to erect a hotel, opera-house, swimming-pool and place for amusements.

HUDSON, N. Y.—Plans are being prepared, according to reports, for the rebuilding of the Columbia Court-house, which was recently burned. Cost to be about \$200,000.

HUNTSVILLE, ALA.—H. S. Bradford, of the firm of Bradford & Rice, has announced that he will erect a handsome two-story residence on East Holmes Street.

IOLA, KAS.—J. W. Kaiser, organizer for the Woodmen of the World, it is said, will erect a building to cost about \$400,000.

JACKSONVILLE, FLA.—It is stated that Cheatham & Shackelton are having plans prepared for a building which it is proposed erecting at Laurel and Adams Streets,

for hotel purposes. It is stated that plans are being prepared for an eight-story and also a thirteen-story building.

The erection of a Y. M. C. A. building, to cost about \$150,000, is reported under consideration.

H. J. Klutho is preparing plans and specifications for a five-story store and office-building to be erected by George W. Clark; 40x80 feet; face brick with stone trimmings; steel and cast iron; tile floors; modern plate-glass fronts; steam heat; two elevators. Cost \$50,000.

JACKSON, MICH.—W. J. Croom is said to be contemplating the erection of a six-story business building.

JERMYN, PA.—Ballinger & Perrot, architects and engineers, 1200 Chestnut Street, Philadelphia, Pa., have invited preliminary estimates upon the finishing of the interior of the Church of the Sacred Heart, Jermyrn, Pa. The building is 114x60 feet, of Romanesque architecture, and the interior finish will be made to correspond. The work includes carpentry, millwork, plastering, etc.

KANSAS CITY, MO.—Hucke & Sexton are reported to have leased property on Twelfth and Wyandotte Streets, and will erect on same a six-story building.

It is reported that J. W. McKecknie, New York Life Building, is preparing plans for a nine-story warehouse and office-building, 160x174 feet, for the Gloyd Lumber Company, to be erected at Twentieth Street and Campbell Avenue. Brick, steel and reinforced-concrete, nickel plumbing, hard plaster, combination light fixtures will be used. Estimated cost, \$400,000.

Plans are being prepared by Lee &

Smith, architects, 515 Main Street, for a two-story flat building, 50x100 feet, for Mrs. S. Tulumia, Fourth and Locust Streets. The building will be constructed of brick, with nickel plumbing, composition roof, hard plaster, combination light fixtures, etc., and will cost \$150,000.

KNOXVILLE, TENN.—W. J. Oliver and associates contemplate building a hotel and office-building, to cost about \$850,000; steel and concrete construction; passageway between the two buildings leading to a rear lot on which will probably be erected a theatre. Frank J. Milburn Company, Home Life Building, Washington, D. C., are the architects.

LA CROSSE, WIS.—Van Ryn & DeGelleke, architects, 211 Grand Avenue, have completed plans for the \$220,000 Normal School to be erected at La Crosse, Wis., by the State Board of Normal School Regents, Madison. The Legislature will be asked to appropriate the necessary funds.

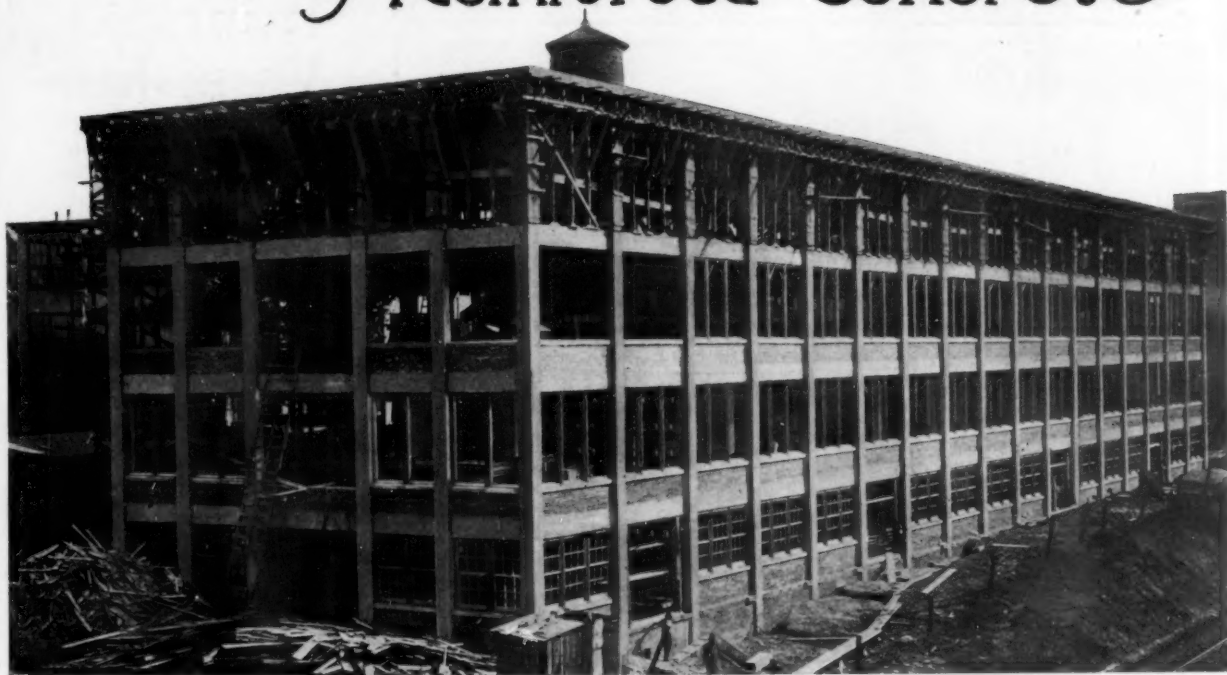
The Council is reported to be considering the issue of \$60,000 bonds for the construction of an auditorium.

It is stated that the erection of a Y. M. C. A. building, costing about \$100,000, is contemplated.

LAFAYETTE, LA.—It is stated that plans by Charles H. Page, Jr., of Houston, Tex., have been adopted for proposed \$50,000 school-building.

LANSING, MICH.—A \$150,000 to \$200,000 plant is to be built here in this city by the Lansing Fuel and Gas Company. The plant is to be absolutely fireproof, with buildings of brick, with iron floors and iron roof trusses. The roofs will be of tile or asbestos.

KAHN SYSTEM of Reinforced Concrete



Showing one corner of the new plant of the E. R. Thomas Automobile Co., Buffalo, during construction. Built of Reinforced Concrete according to the KAHN SYSTEM.

Convincing proof of the merits of the Kahn System of Reinforced Concrete is found in buildings successfully constructed in every state in the Union and abroad.

The Kahn System is based on the use of the Kahn Trussed Bar, with rigidly attached, shop-prepared diagonals, whereby the cost of installing is reduced to the lowest possible point and the highest degree of reinforcing efficiency is secured. Structures of reinforced concrete are monolithic in type—as enduring as though carved out of solid rock.

During the coming year we will continue the publication of the “Trussed Concrete Bulletin,” and if you will write your request on your business letter head, we will be pleased to place your name upon our mailing list.



Trussed Concrete Steel Co.

45 Congress Street

LONDON

DETROIT

TORONTO

"THROUGH FRISCO'S FURNACE" EDITION DE LUXE

Illustrations of seven modern steel frame buildings at San Francisco that withstood the earthquake and fire of April 18th, 1906, with reports on the rust-resisting qualities of Dixon's Silica-Graphite Paint on the steelwork.

WRITE FOR A FREE COPY OF BOOK No. B-14

JOSEPH DIXON CRUCIBLE CO., Jersey City, U. S. A.

ESTABLISHED 1868

THE HAYES METALLIC GLAZED STRUCTURES

SKYLIGHTS FIRE PROOF WIRE-GLASS WINDOWS NEW YORK.

71-8TH AVE.

METAL LATHINGS ETC.

MINERAL WOOL

FIRE, SOUND and VERMIN PROOF INSULATOR
SAMPLES AND CIRCULARS FREE

U. S. MINERAL WOOL CO., 143 Liberty St. NEW YORK

Lightning Rods

Protection assured by our continuous copper conductors. Our booklet of valuable information, "Flashes of Lightning," illustrated, sent free.

THOMAS W. JONES, 180 Front Street NEW YORK



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.

For Sale by Dealers in Paints, Hardware and House-Furnishings.

Send for our FREE BOOKLET telling of the many advantages of BUTCHER'S BOSTON POLISH.

The Butcher Polish Co., 354 Atlantic Avenue, Boston, Mass. is a superior finish for kitchen and piazza floors.

Our No. 3 Reviver

STANLEY'S BALL BEARING HINGES

In WROUGHT BRONZE and STEEL

NEVER WEAR DOWN. NEVER CREAK. NEVER REQUIRE OILING.

The improved washer protects the balls against moisture and dust.

For Sale by Leading Hardware Dealers.

Attractive Literature for the asking.

THE STANLEY WORKS
NEW BRITAIN, CONN. NEW YORK CHICAGO

Press reports state that an addition is to be built to the State Capitol, to cost \$550,000. The addition which it is proposed to erect will have four stories and basement. It will be lower than the present building. The stonework will match exactly that of the present structure. There will be 106 rooms in the addition and 26 in that part of the old building which is to be remodeled. The addition will be 1,300 feet long and 146½ feet wide. It will stand 30 feet back from the main building with which it will be connected by corridors. The basement and first floor will contain offices, and on the second floor there will be a court-room. The State Library will occupy the third floor and the State Historical Society will have a historical museum on the fourth floor. E. E. Myers, 732 Second Avenue, Detroit, is architect.

MARSHFIELD, Wis.—Reports state that directors of the First National Bank have

decided to enlarge their building. Tile floors and new fixtures will be used. Architects are now being consulted.

MAYSVILLE, KY.—It is stated that plans have been prepared by Architects Brown & Davis, Fosdick Building, Cincinnati, for a church for St. Patrick's congregation. Cost, \$53,000.

McKEE'S ROCKS, PA.—Reports state that a new building is to be erected for the McKee's Rocks School, to cost \$100,000.

MEMPHIS, TENN.—Plans are being prepared by Architects Chighizola, Hanker & Cairns, Schimitar Building, for a residence to be erected by Carruthers Ewing, Russel Martin and Brinkley Snowden. Cost, \$90,000.

R. J. Darnell, lumber manufacturer here, contemplates erecting a modern residence on Union Avenue at Raine Place. The structure will cost \$40,000 or \$50,000.

MIDLAND, MICH.—The Board of Super-

ESTABLISHED 1844

FRENCH'S

Paints and Varnishes

Highest Standard Attainable
Write for prices and samples

Samuel H. French
and Company

PHILADELPHIA

visors, it is stated, is considering the erection of a court-house at a cost of \$60,000, and will submit to the voters at the April election the question of issuing bonds.

MILLEDGEVILLE, GA.—Plans are being prepared for the issuance of \$50,000 for a new court-house for Stevenson County.

NEW YORK, N. Y.—McKim, Mead & White, 160 Fifth Avenue, as architects for the city, have filed plans for the six-story and basement pathological building which is to form the northwestern section of the new Bellevue Hospital, which in its entirety is to cost \$9,000,000, and will cover a plot on First Avenue, extending from Twenty-sixth to Twenty-ninth Streets. The pathological building is to be 142x120 feet, of ornamental brick, with a base of granite and trimmings of limestone. The building is to cost \$800,000, and is the second of the group for which plans have been filed.

Swift & Co., 32 Tenth Avenue, Manhattan and Chicago, have awarded the general contract for a large fireproof reinforced-concrete and steel warehouse, at Brook Avenue and Rose Street, the Bronx, to the H. Wales Lines Company, of Meriden, Conn. It will be one of the best equipped storage plants ever constructed. Building operations will be pushed rapidly.

It is reported that plans have been approved by the Building Department and work is about to be started on the store and flat house, which is to be built at 59 to 63 Market Street, for Levin & Kiniger, 66 East Broadway. Charles M. Straub, 122 Bowery, is the architect, and plans provide for six-story building, measuring 69x51x53 feet, to have the customary construction and interior improvements. The cost will be about \$50,000.

Plans have been approved by the building department by Architect Ralph E. White, of Philadelphia, for a new hotel to be erected at the southeast corner of Broadway and Thirty-third Street, for Phoenix Isman, of Philadelphia. Plans provide for twenty-story building, of fireproof construction, to have the latest improvements and appliances in all lines, and to cost about \$2,000,000.

Architects Neville & Bagge, 217 West 125th Street, have completed plans for a business building to be erected at 27 to 33 West Twentieth Street, for C. Brogan,

ONE OF THE
VALUABLE *and*
DISTINCTIVE
FEATURES *of*



Pennsylvania Interlocking Rubber Tiling

is the perfect interlock, which cannot leave the slightest crevice between the tiles. The uniting edges are so curved that even in irregular surfaces they adapt themselves to each other absolutely. When the floor is completed no space can be found in which the finest hair might rest. Many other equally important and exclusive advantages of Pennsylvania Interlocking Rubber Tiling are described in our Book-of-Designs-in-Color, mailed free on request.

PENNSYLVANIA RUBBER COMPANY, JEANNETTE, PA.

NEW YORK—1741 Broadway
CHICAGO—1241 Michigan Avenue
DETROIT—237 Jefferson Avenue

PHILADELPHIA—615 North Broad Street
ATLANTA, GA.—102 North Prior Street
CLEVELAND—2134-6 East Ninth Street

BOSTON—20 Park Square
BUFFALO—717 Main Street
LONDON—26 City Road

THE CUTLER MAILING SYSTEM



MODEL C, OPEN.

IS EXPLICITLY AUTHORIZED BY THE POST OFFICE DEPARTMENT UNDER PROVISION OF A SPECIAL ACT OF CONGRESS AND SHOULD BE SPECIFIED WHERE THE STANDARD AUTHORIZED MAIL CHUTE EQUIPMENT IS DESIRED.

DESIGNATE "MODEL C" IF THE VERY LATEST AND BEST FORM AS ILLUSTRATED HEREWITH IS REQUIRED. INTERIOR UNDER GOVERNMENT LOCK BUT INSTANTLY ACCESSIBLE TO AUTHORIZED PERSONS.

INSTALLED IN CONNECTION WITH THE U. S. FREE COLLECTION SERVICE UNDER THE CUTLER SERIES OF MAIL CHUTE PATENTS ONLY BY THE SOLE MAKERS,

THE CUTLER MANUFACTURING CO.
CUTLER BUILDINGS, ROCHESTER, NEW YORK.

In all Modern Building Operations

**WHETHER CONSTRUCTION, REMODELLING
OR IMPROVEMENT, THE LUXFER
SYSTEM OF PRISM LIGHTING PLAYS AN
INCREASINGLY IMPORTANT PART.**

The day has passed when architects or builders looked upon Luxfer installations as experiments.

LUXFER has proven its worth and efficacy in solving daylighting problems whether involving overhead or underground illumination.

Another development is equally marked. Luxfer no longer is confused with so-called "glass prisms," but stands alone as a dependable medium for the transmission and scientific diversion of daylight to a given point to supply an evident deficiency.

LUXFER is a "prism" and LUXFER is "glass," but no "glass prism" other than our own is "Luxfer." The difference is the difference between results and dissatisfaction—between science and guesswork—which facts most architects and builders are fully aware of.

AMERICAN LUXFER PRISM CO.

160 Fifth Ave., New York

BOSTON. CLEVELAND. CHICAGO. SAN FRANCISCO.



JENKINS AUTOMATIC AIR VALVES

Simple and Reliable as there are no complicated parts to get out of order.

Full Nickel Plated, they always present a neat appearance.

Our Trade Mark is stamped on all genuine.

Jenkins Bros., New York, Boston, Philadelphia, Chicago, London.



DIFFUSERS

HEATING, VENTILATING, COOLING,
MECHANICAL DRAFT, DRYING,
AIR WASHING, ENGINES.

Specify N.Y.B. System :: Get Catalogue 53-M

NEW YORK BLOWER CO.

STEWART AND 25th PLACE

CHICAGO



SOLID BRAIDED SASH CORD

Cotton, Linen, Hemp and Samson Spot Cord

We make them all and like to send samples.

SAMSON CORDAGE WORKS,

Boston, Mass.

Corrugated Concrete Pile Co. of America

1170 Broadway, New York

LICENSEES

Alling Construction Co. CHICAGO William L. Miller BOSTON The Engineering-Contracting Co. BALTIMORE

WORKS OF ART

require special lighting to bring out their predominating characteristics. We make a feature of picture and gallery lighting. Any information desired on receipt of necessary data.

I. P. FRINK, 551 PEARL ST., NEW YORK.

Asphalt FLOORS, ROOFS,

SIDEWALKS and CARRIAGE WAYS

of Public Buildings, Hospitals, Warehouses, Stables, Cellars, etc., laid with

VAL de TRAVERS ROCK ASPHALT

Durable, Fireproof and Impervious. For estimates and list of works executed, apply to

The Neuchatel Asphalt Co., Limited

265 BROADWAY - NEW YORK



The architect with Yale & Towne Hardware

to draw upon can give his client almost unlimited choice and by reason of the great range of quality, suit him exactly on price.

As a first step, send for our free portfolio of designs.

The Yale & Towne Mfg. Co.

No. 9 Murray Street, New York



STATLER HOTEL, BUFFALO, N. Y., ESENWEIN & JOHNSON, ARCHITECTS.
Built on Raymond Concrete Piles.

Raymond Concrete Piles

Have proved Economical and Satisfactory wherever used. Tell us your foundation troubles. We can help you.

PERFECTION OF EVERY PILE
GUARANTEED

No working in the dark, consequently no failures.

Recommended by the leading Architects and Engineers throughout the country.

We will gladly investigate conditions and furnish alternate plans and estimates.

Work handled in any part of the United States.

Send for illustrated catalogue

RAYMOND CONCRETE PILE CO.

135 ADAMS STREET, CHICAGO, ILL.

NEW YORK OFFICE: 71 Nassau St.—Telephone, 840 Cortlandt

The American Architect and Building News.

Vol. XCI.

SATURDAY, FEBRUARY 23, 1907.

No. 1626.

A Journal of
Constructive and Decorative Art
Published Every Saturday by

THE AMERICAN ARCHITECT

(Incorporated)

No. 12 West 40th St., New York

REGULAR EDITION - - - - \$6.00 a year

Single Copies from 15 to 50 cents.

INTERNATIONAL EDITION - - - \$16.00 a year

Single copies from 40 to 75 cents.

Entered at the Post-office, New York, as Second Class Matter.
Copyright, 1907, by The American Architect.

CONTENTS

SUMMARY	81-82
A California Law to Compel the Employment of an Architect for Every Building—The Insincerity of the License Movement—Minnesota Threatened with a License Law—Death of Albert W. Maas, Architect—A Height-limit Law to Protect the Capitol at Hartford, Conn.—“Tainted Money” and the Over-sensitive Official—An Expert’s Fee.	
ARCHITECTURAL DESIGN IN AMERICA	83
THE SANITARY FEATURES OF MARKETS AND ABATTOIRS.—IV.	85
COMMUNICATION:	
Competition for Concrete Suburban Houses.	87
ILLUSTRATIONS:	
House of G. L. Williams, Esq., Buffalo, N. Y.: Two Plates—The Market Square, Pullman, Ill.: Two Plates—Houses at Rochester, N. Y.: Three Plates—Buildings for the Union of American Hebrew Congregations, Cincinnati, O.	
Additional: Portico: House of G. L. Williams, Esq., Buffalo, N. Y.	
NOTES AND CLIPPINGS	88

IN one place, at last, architects, or their advocate, have found themselves constrained to call a spade a spade. “Then this bill should be called ‘an act to compel the employment of architects?’” asked Assemblyman Devlin at a hearing before the Judiciary Committee of the California Legislature. “That is certainly its object,” was the frank acknowledgment of the attorney who was employed by the State Association of Architects to advocate the passage of Bill No. 453, introduced by Mr. Transue, of Los Angeles. We do not know what the provisions of Bill No. 453 actually are, but we gather from the context that it is intended to see the usual architects’ license law and “go it one better,” for it apparently is devised to prevent any carpenter, builder or private individual from erecting from his own plans a building intended for his own use, a privilege which is usually accorded to such persons by the ordinary license laws. By this new bill, apparently, an architect must be employed in connection with every building of any and every size and cost, wherever and by whomsoever erected by the State of California: it is the natural sequence and complement of the license law already in force, and shows on its face that it, like its progenitor, is in reality merely a trade union measure, and that the plea that the safety of the dear public is the controlling impulse is the shallowest of pretenses.

IF the public welfare were really endangered by allowing the erection of buildings where licensed architects were not employed, perhaps our scruples would be mollified; but, as it is probably a fact that nine-tenths

of the buildings erected from their own designs by carpenters, builders and so-called architects who could not pass licensing examinations are actually constructed safely by rule-of-thumb methods which they are fully competent to employ, and as of the remaining tenth, where a risk has to be accepted, by far the larger part successfully stand the test of eventuality, it is plain that the risk to the public is not very serious, while the gain under license laws is not commensurate with the injustice inflicted. It is peculiarly human that architects, who are especially expert in the arts of design, should seek to keep the entire field of building construction to themselves, but they realize that this cannot be accomplished by compelling designers to pass examinations in the arts of design, for they realize that there are no examiners of superhuman powers of discernment, and that the canons of art are disputable and always matters of contention. They therefore fall back on matters that can be made the subject of examination and be compared with accepted standards. By so doing they practically throw their own case out of court and do gross injustice to many of the very men whose abilities as artists and designers, if allowed free exercise, are of prime importance to the growth and progress of the art. How much of a protection to the public the license system really is can be inferred by recalling how, a dozen years or so ago, a certain church in Washington collapsed in ruin, and yet the architect who designed that church—and we do not mean to imply that the collapse was necessarily or primarily due to any fault on his part—could have passed any examining board with an average of 90 per cent. plus.

SHORTLY after the introduction of the Indiana Architects’ License Bill to which we referred a few weeks ago, the Minnesota Chapter A. I. A., has caused to be brought before the Legislature of its State a bill for the licensing of architects, based on the usual formula and predicated on the assumption that it is required to assure the safety of the public. Apparently, the people of Minnesota are at risk through the operations of incompetent builders and shyster architects, and the Minnesota Chapter A. I. A. comes to their relief and shows how, with the flint of a pen and the payment of \$25 as a license fee, all these now incompetent shyesters may be instantaneously transformed into regular “registered architects” of the highest respectability and most unquestioned competence. This bill, like all others of its kind we believe, allows, within six months of its passage, the registration, without examination of any kind, of any person who can satisfy the examining board that he has been practising architecture as a profession for the preceding two years, and it would be almost hopeless to attempt to secure the passage of such bill without a clause of this nature. It follows, therefore, that these shyster architects, who, seemingly, overrun the State, must be enrolled amongst the elect, for they, of course, will be amongst the very first to pay the license fee. How the safety of the public is to be assured by this hocus pocus must puzzle the sophists. Now, if the architects who promote and advocate license bills are

really sincere, they should take a leaf from the Code Napoléon, and ask to be held accountable *dans ses biens et bons* for the safety and perfection of their work during a term of years, as is the case with French architects and those who practise in the Province of Quebec. We do not, however, advise them to this course, for we feel that the conscientious practitioner already has anxieties enough on his mind, and claims enough on his meagre income.

IT is commonly believed that, when a father does not know what calling a son is fitted for, it is good advice to tell him to send the boy through a law school, since there are so many side issues to legal practice. We have always felt that the same advice was applicable to an architectural education, and the soundness of the belief is shown by the history of the late Albert W. Maas, who died in New Orleans last month at the age of eighty. Born in Berlin and educated there as an architect, he had already engaged in the felt-roofing industry, and had done much work in the laying of asphalt streets in Germany and England before he came to this country many years ago and settled in Chicago. There he was employed by the Chicago, Milwaukee & St. Vincent Railroad Company, and, with a partner, in private practice; but he seems to have been discouraged when his considerable property was wiped out by the great Chicago fire. Going South he organized, in Mississippi, the German Silk and Agricultural Association, which gave employment to many Chicago refugees. Later he took up a process for utilizing Spanish moss; but here, again, fire was a natural and successful opponent. In the last part of his life he was established in New Orleans, and here he was occupied with several inventions designed to utilize the by-products of the saw-mills. The last of his inventions was that much needed article, a white cement: this he is said to have perfected and, just before his death, sold to an Oklahoma concern, so the invention is not to be lost to posterity. As will be seen, although engaged at different times in many commercial undertakings, they were in each case closely correlated with building interests. In just this way there are now many men engaged successfully in commercial pursuits, the doors to which were opened to them from the main pathway of architecture.

THE spreading of the "city beautiful" movement, now so general, is illustrated in rather a curious way in Hartford, Conn. Set in the middle of a special park, and standing upon a fairly elevated knoll, one would feel that the State-house there was sufficiently isolated to be quite independent of the effect that surrounding buildings might possibly have on it. Yet a bill has lately been introduced, by Mr. Hooker, which provides that no building in Trinity Street or Capitol Avenue, at the side and rear, as we recall it, may have a height of over seventy feet. Profiting by the experience that Massachusetts has had because of fixing a height-limit for property neighboring the Boston State-house, the bill provides that within a year from its passage property-holders shall receive compensation for the loss imposed on them by the new rule. If such a law can be enacted

in the case of a building already so reasonably protected by existing conditions, we may hope to live to see the time when the property abutting on important public buildings everywhere may be bonded, in the way we suggested long ago, so that when any attempt might be made to improve such abutting properties the improvement could be carried out under restrictions that would prevent injury to the architectural effect of the dominant public building.

AT about one and the same time, there was enacted in the State of New York what is known colloquially as the "anti-tipping" law, and in England a law, framed for an identical purpose, which is known as the "Corrupt Practices Act." The general purpose of either law is to check, if not obliterate, the practice of giving and receiving illicit commissions through making both the giver and the receiver of such commissions guilty of a misdemeanor and punishable by heavy fine. There are few architects who have escaped the insult of a bribe proffered by some wily material-man—though it must always be kept in mind that not all commissions that are proffered to an architect are understood to be, or really are, bribes. It is not often, however, that an architect finds the tables turned on himself, even in a case where each party to the transaction knows there can be none but a generous and honorable intention. It seems that, in Chicago, the Home for the Aged, at Harrison and Throop Streets, finds itself unable to raise the two thousand dollars necessary to provide the building with the fire-escapes which the Commissioner of Buildings declares must be installed in conformity with the law, a law which the Commissioner is enforcing with determination and impartiality. Feeling the case was a hard one, the Commissioner has interested himself to raise the needed fund by subscription. But when a well-known firm of architects generously sent its check for one hundred dollars, Mr. Bartzen returned it with thanks, explaining that his dealings with architects were such that he could not be placed under any obligations to them. The action was irreproachable, of course, but on the principle *mens sibi conscia recti* the contribution might rightfully, and to the benefit of the Home, have been accepted.

A CASE of interest to architects, who may have to give expert testimony and do not know what charge to make for their testimony, has lately been reopened in one of the New York courts. The plaintiff, an alienist, sues to recover the unpaid balance of his bill, one item of which is a charge for six hundred and sixteen hours' time spent in consultation and examination at the comfortable rate of twenty-five dollars per hour. The case is of this further interest to architects, in that the subject of this expensive observation was Joseph Richardson, a builder and architect of sorts, who left an estate of some twenty million dollars, one of whose eccentric acts it was to build the notorious "spite house" at Lexington Avenue and Eighty-second Street, New York, and then to occupy it himself, finding for himself such comfort as he might within its ten feet of width.

ARCHITECTURAL DESIGN IN AMERICA.

AT the fortnightly meeting of the Architectural Association on Friday, January 26, Mr. Arthur Keen read a paper by Mr. R. Clipston Sturgis, of Boston, on "General Tendencies of Modern Architectural Design in America, and American and European School Work," as follows:

"At the time of the break with the mother country, the architecture in that part of the country which was colonized by England was following closely on the lines of English work. At the end of the XVIIIth century the magnificent architectural record of the mediæval builders had become history, and archæology and Classic forms and Classic formula had taken the place of a vital art.

"The revived Classic forms with their fundamental principles of proportion and symmetry were, however, by no means unsuited to the new conditions among which they found development. The growth of cities, with the obvious requirements of direct thoroughfares and economical use of ground, encouraged and gave reasonable opportunity for the symmetry of Classic planning. From the practical and economical point of view the regular plan commended itself on all sides, and the fact that it was the prevailing fashion on the Continent was sufficient to fix it firmly as the universally-accepted method in America.

"In England it had its wise and reasonable expression in innumerable buildings in city and country, and while the rambling and picturesque plan of the Elizabethan and Jacobean work will always remain, to the foreigner at least, the distinctive and altogether perfect expression of English domestic architecture, the houses built under Queen Anne and the Georges have a charming quality of homelike comfort which in its way is unequalled and which, in its close adaptation to what one might call modern domestic conditions, was more reasonable than a plan based on feudal conditions.

"This was the condition architecturally that set its stamp on the English Colonies in America, and, inasmuch as we had not the wealth of the mother country, we followed the simplest and best expressions and were under no temptation to imitate the extravagances of the more ambitious English examples. It was that charming house in the close at Salisbury, and the host of examples that are in line with this work of Wren's—not Houghton or Blenheim—that guided the taste of the colonists. For awhile after the establishment of the United States our architecture continued in a quiet and dignified way to follow the trend of matters architectural in the Western world. The acts that made the United States an independent power were not acts of revolution in the ordinarily accepted sense. We had no quarrel with England's Government, as a form of government, but only with certain exceptional applications of it that were invented for our special benefit. When, therefore, we started to govern ourselves a republican form of government was adopted (we could not very well have had any other), but there was no radical change in our civilization, our outlook, or our environment. The fine arts, architecture and literature, have their proper place and their due prominence in such a social condition. With Jefferson as with Washington, these things were a necessary part of the equipment of a cultivated man; and the cultivated man was the one who naturally belonged at the head of affairs. These conditions, however, did not continue with us. A variety of causes demanded and produced a type of man essential for the development of a country of whose resources Washington had but the faintest perception. A type of man who must combine the indomitable courage and perseverance of the pioneer with the shrewdness of the promoter, who must be able to understand what the resources and possibilities of the country are and to be competent to develop them. Such men had neither the time nor the temperament for that sort of cultivation which every gentleman of the first generation considered essential.

"Even in the old world, the period from 1830-1870 was a dull time architecturally (to put it very mildly), and with us it was the abomination of desolation. Every kind of good precedent was thrown to the winds. Sound Classic precedent slipped into a spurious Greek executed in wood; Gothic, which had long been a terra incognita, even to the cultivated, was explored by the ignorant and rendered in wood with the aid of a jig-saw. Here and there were sporadic cases of fairly good work, but architecture as a whole was in a most deplorable state at the close of our Civil War. In judging work of this period, however, it is only fair to bear in mind the special circumstances that differentiated the United States from the older Western civilization.

In the early days both economy and speed of construction favored the use of wood, and the necessity of clearing the land made it practically imperative. Following on good Georgian precedent much good and exceedingly clever and interesting work was done. Stone precedents and examples were interpreted in wood with a delicate and charming sense of the difference in the character of the material. Thus wood came to be established as the common building material, and as long as good taste ruled and modest means limited expenditure the results were charming. But when men without cultivation or taste acquired wealth the temptation to extravagance and eccentricity resulted in work wholly bad; and these bad examples were received with popular approval and caused rapid deterioration in the perception of what beauty and truth really meant. Rapid growth of wealth, and rapid expansion of the people into new territory, made it impossible to build in any but the quickest way, and the constant shifting of population encouraged ephemeral work. The contrast in the construction of railways in America and England is an excellent example of the necessities which forced upon America its methods. England, building for a compact and settled community, built with a view to permanency and safety. The United States, forced to build to serve scattered communities in vast unoccupied areas, with a sole eye to setting rails on which a train could run, built in the quickest and cheapest way, and it was years before there was time or money to consider better methods. In architecture it was the same story, and this accounts for, if it does not excuse, the amount of unstudied and vicious work done in the forties and fifties.

"After 1865, with the establishment of peace and the rapid growth of prosperity, people had once more a chance to pay some attention to the fine arts. There was an enormous demand for buildings, and those who in the seventies were thinking of architecture as a profession had the assurance that the well-equipped and well-trained architect had before him a great career. Our own architectural schools were in their infancy, but one or two had already begun to do good work at that time. The *École des Beaux-Arts* at Paris offered the best opportunity for sound training. Our people have always felt kindly to France, and have admired her position in the world of fine arts. To Paris, then, our students went to receive sound training on classic lines. At the same time attention was again directed, chiefly through English influences, to the value and beauty of mediæval work. You know what that was in England and how Ruskin and a host of saner followers of that great enthusiast reawakened in the hearts and understandings of all English-speaking people the marvelous treasures of the centuries that preceded the Italian Renaissance.

"With eyes newly opened our people began to see the sound common-sense beauty of the simple Classic work of our forefathers.

"Queen Anne and Georgian work and the buildings of the early days of Independence once more received the attention and reverence they deserved. A small but growing body of men began to stem the tide of horrors which had resulted from an ignorant and unreasoning demand for something new, something American, something which was not part and parcel of the effete civilization they fancied we had left behind.

"Added to this new self-respect for our past came a reawakening sense of the treasures of architectural history in mediæval times. It was like discovering a virgin field, so long had it lain fallow, and it was entered on with the greatest enthusiasm. Students returning from abroad had their sketch-books packed with picturesque and often very cleverly drawn sketches of French manor and farm houses, Romanesque work from the south of France, Early Italian work, the vigor of Tuscan palaces, the subtle beauty and gorgeous color of the south and of Constantinople, and the Gothic of France and England. It was a surfeit of good things, far more than we were able to digest. The result at first was a host of miserable failures, and, to offset this, a few brilliant successes.

"The few successes were, however, a great stimulus to the students following, and to those already at work. Each succeeding year saw the students begin work better equipped and the men in active practice gained knowledge rapidly through great opportunities, and by failure as well as by success. A nation with so little in the way of architectural inheritance, and with so few conservative tendencies, must necessarily be open-minded to new impressions. The American student abroad is constantly envying the greater opportunities which Englishmen have. They envy them not alone nor chiefly for the architectural treasures that surround them at home, for the wealth of precedent that

guides them aright in English ways, but for the handy Continent, France and Holland across the Channel, Italy but a few hours' journey farther on, so that a short holiday may at any time put the English architect in the midst of the best examples of architecture in the Western world. But, as a matter of fact, one is inclined to think that the American student, when he does cross the Atlantic, sees with more open eyes, and profits more readily from what he sees, and so is better off than the Englishmen; nor need he really envy those who live in the midst of the treasures of the Continent. The Frenchman may go to Italy to study, but does not often trouble himself to seek architectural knowledge in England or Holland. The German may travel in France and Italy, but apparently profits little by such experience. But the American student goes everywhere with the eager eye of one to whom all is new and wonderful. No native bias, no prejudice, no conservative respect for the work of his own people hampers him in his study.

"This is a great advantage. Another equally great is that architects in the United States are largely drawn from the class who have the means for a thorough education as a foundation. To limit a gentleman's occupation to the army, the navy and the church would be utterly unintelligible to an American. The church here undoubtedly holds an important place in the community, but that could not be said of the army and navy. Nor is diplomatic service as yet looked upon as an important and interesting field for the well-educated and ambitious man. Those who in England are by birth entitled to the best education are attracted to occupations which seldom tempt us. The result is that professions like architecture, medicine and the law are filled by the best-educated men. Architecture as a profession is as highly esteemed as the law, and rather higher than the occupations which until recently were looked upon as the only ones available for an English gentleman's son. The students who go abroad are generally men well equipped intellectually to take full advantage of the opportunities offered them.

"The result of this with us has been two-fold. The lack of established precedent and the wealth of ideas accumulated by study abroad has had the effect of urging our people to new effort, and our confidence in our great and prosperous future has helped us to believe that we would develop a new style of architecture, something American, something quite our own. On the other hand, the study of the fine old examples has encouraged a sincere and deep-rooted admiration of the masterpieces of the past, and a wholesome modesty as to our ability to equal them by anything that does not follow closely on the precedents of the past.

"Both phases have had their development here, and one is inclined to think that the sober sense of the present generation sees good in both points of view, but is far more governed by the former. That is, we may in time develop something especially adapted to modern use—the many-storied structure on immensely valuable land may bring its logical solution. The modern methods of construction—the steel skeleton—reinforced-concrete—may lead us to new expression; but, if we do so develop, it will be along the lines of the sound planning of the schools, the reasonable laws of construction and decoration that have been exemplified and proved in all the work of the past, and that have stood the test of time.

"The best architectural work of the past decade in America is not new, is not American, but is conservative. More conservative, one ventures to say, than much of the work of France, with its exposition style of architecture influencing work that is worthy of more serious treatment; more conservative than Germany, with its often grotesque strivings for an art that is new; more conservative than England, whose civic architecture has neither advanced mediæval development from the point at which Pugin placed it when the Houses of Parliament were built, nor improved on the Classic sobriety and dignity of St. George's Hall in Liverpool.

"American architects have been influenced more or less by all the architectural experiments of the Continent, and have had their own vagaries of experiment. Richardson dug into the treasures of Romanesque work, and conceived and executed one or two noble buildings with the spirit of the past and a certain modern vitality; but the experiments conducted by his numerous followers brought disgrace and obloquy on the style. Only in the backwaters of civilization is it attempted now. The decorative motives of India and the Far East were taken by some as the proper form in which to clothe a skeleton structure—the ornament being truly superficial rather than structural—a sound

enough theory. But the experiments along this line were more interesting than convincing. Modern French has set its rather loud and often vulgar mark on much of our municipal and domestic work in the great cities. The debased examples of this, however, have been such a warning to the leaders in this movement that the work of these leaders is tending to the quietest, simplest and most refined expression of French art; indeed, the best work of this class is almost more closely akin to the precedents of Italy—the Renaissance fountain-head—than to those of France. English Gothic, especially its collegiate phase, has found its expression here, and with the chastened memory of the early American barbarities in this style, and a grateful affection for such sound old-school examples as Trinity Church, New York, the development here has not departed much from sound precedent, but in a general way tends toward what might have been expected if Gothic had continued its natural course. It is, perhaps, needless to add that there has been much ignorant handling of this most difficult style.

"The most discouraging tendency in American architecture to-day is its individualistic character. It is the natural outcome of our form of popular government, and it is one of the penalties we pay, along with untrained public service and ill-executed public utilities, for the uplifting effect on the community of popular control, for the self-respect and confidence engendered by the sense that each voter has of being a definite factor in shaping the progress and the destiny of his country.

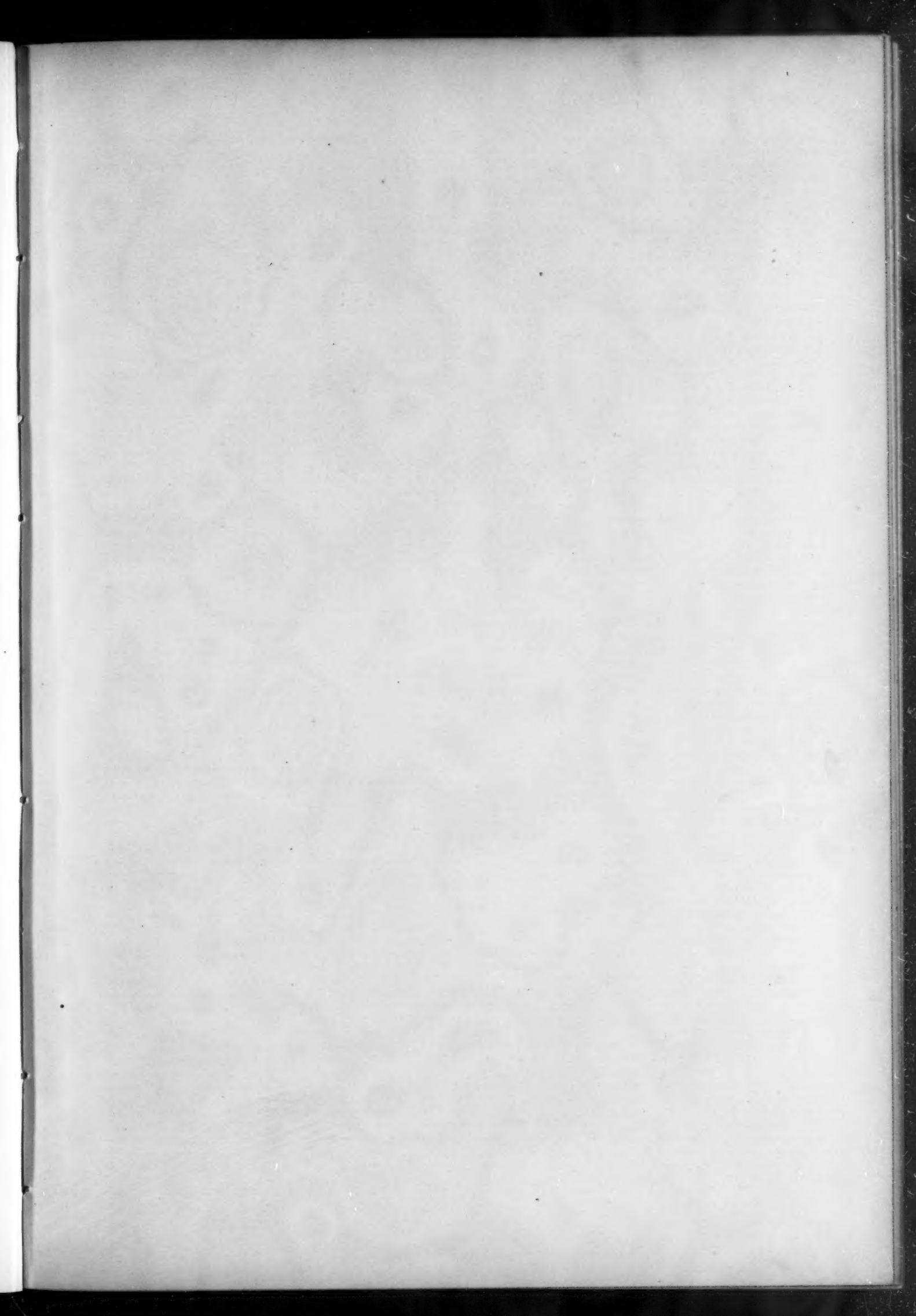
"The effect of the individual tendency is two-fold; first, to encourage the expenditure of study, time and money on private projects, unhampered by limiting restraints, even those that are for the general good. The individual may exercise his taste and judgment, or give a free hand to the architect in whom he has confidence. The architect thus has exceptional opportunities.

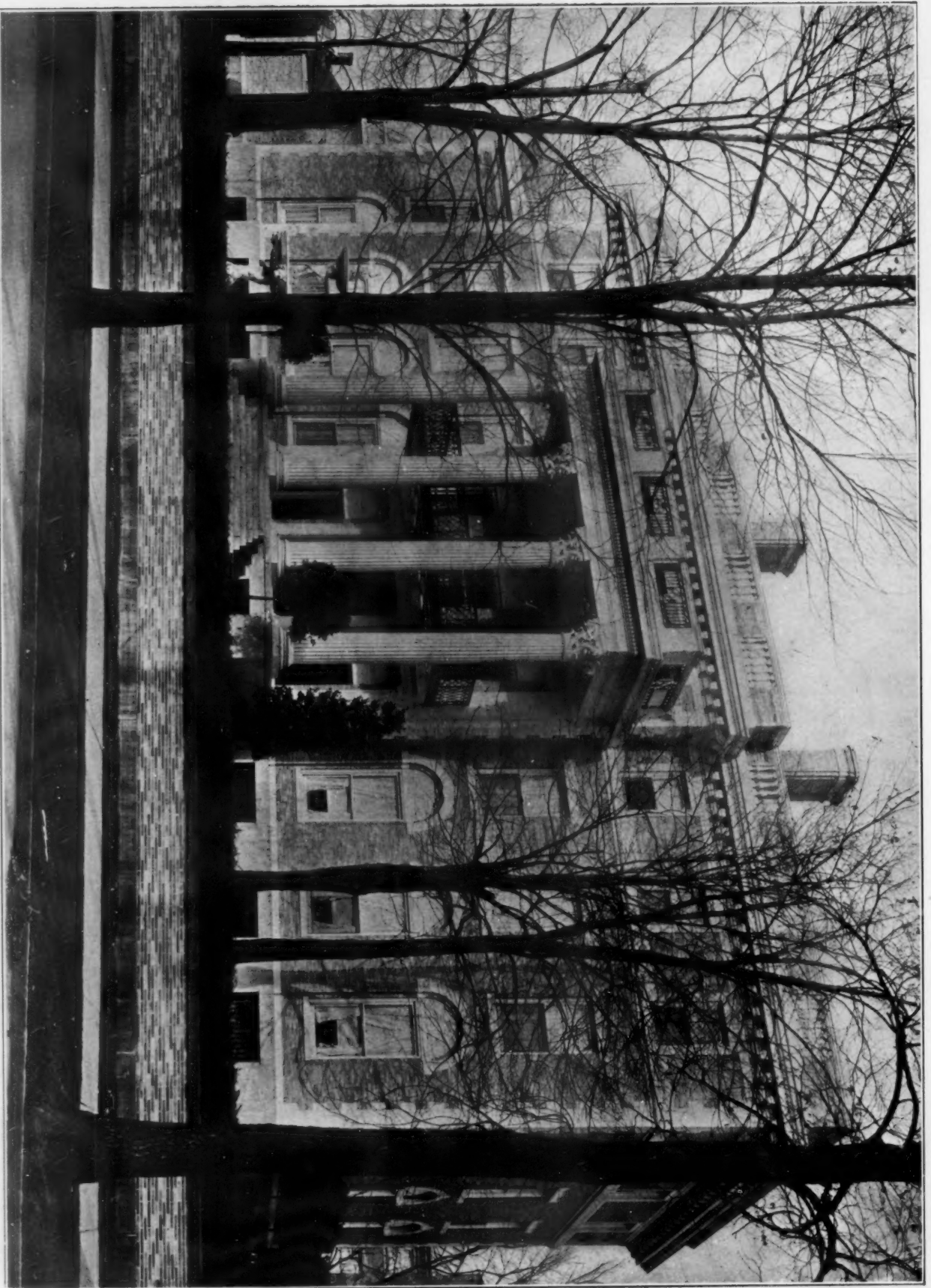
"On the other hand, the individual tendency makes directly against all work that has for its primary element the general good; and, consequently, we lack in America good examples of work which depend more on the execution of a well-considered whole than on the excellence of detail. That our architects are able to handle well general problems of planning and composition was abundantly shown in the buildings surrounding the Court of Honor in the Chicago Exposition, and it has been repeated with more or less of success at Buffalo, Omaha and St. Louis. Such opportunities do not occur under ordinary conditions governing either Federal or large State and municipal undertakings.

"The absolutely autocratic control of Napoleon made possible the reconstruction of Paris. The almost equally autocratic or independent County Council cuts great thoroughfares through London, and lays down conditions for the buildings which are to line them. The control of great properties in the hands of individual owners makes possible the systematic and uniform treatment of a given civic area. You think promptly of Cubitt and Belgravia, but there is something pretty distinguished there which Kensington lacks. There are things in Bath not often rivaled to-day in city streets or squares. No such conditions exist with us.

"It may be said that France is now a republic, and yet Paris has still laws which, by limiting cornices and sky-lines, produce the regularity which is almost the only thing needed to give dignity and distinction to a great thoroughfare. It may equally be said that the South American republics, in their great cities, Buenos Ayres and Rio de Janeiro, show a sense of general civic beauty which is not to be accounted for by autocratic control or large holdings of real estate. This is true, but France grew into republicanism with a well-defined and established policy, and had sufficient taste to appreciate it. Brazil and the Argentine inherited the Latin outlook, which is primarily one of subservience to law and order; and temperamentally they, too, like the French, were sufficiently imbued with the love of art to appreciate this inherited tradition. England, from whom we inherited our architectural tradition, in common with most of the Anglo-Saxons, laid no great stress on general schemes of civic beauty.

"It is perhaps not strange, but it is certainly deplorable, that America, with its many brilliant examples of individual or isolated works of architecture, should be so absolutely lacking in distinguished civic architecture. No autocratic power, either of an individual or of a group of men, has as yet been sufficiently interested in large architectural schemes as to ensure their execution. Perhaps for us it is as well that there should not be and that we should turn, perforce, for support and encouragement to the people themselves; but I believe it is more than doubtful if this expression of art will ever be popular.





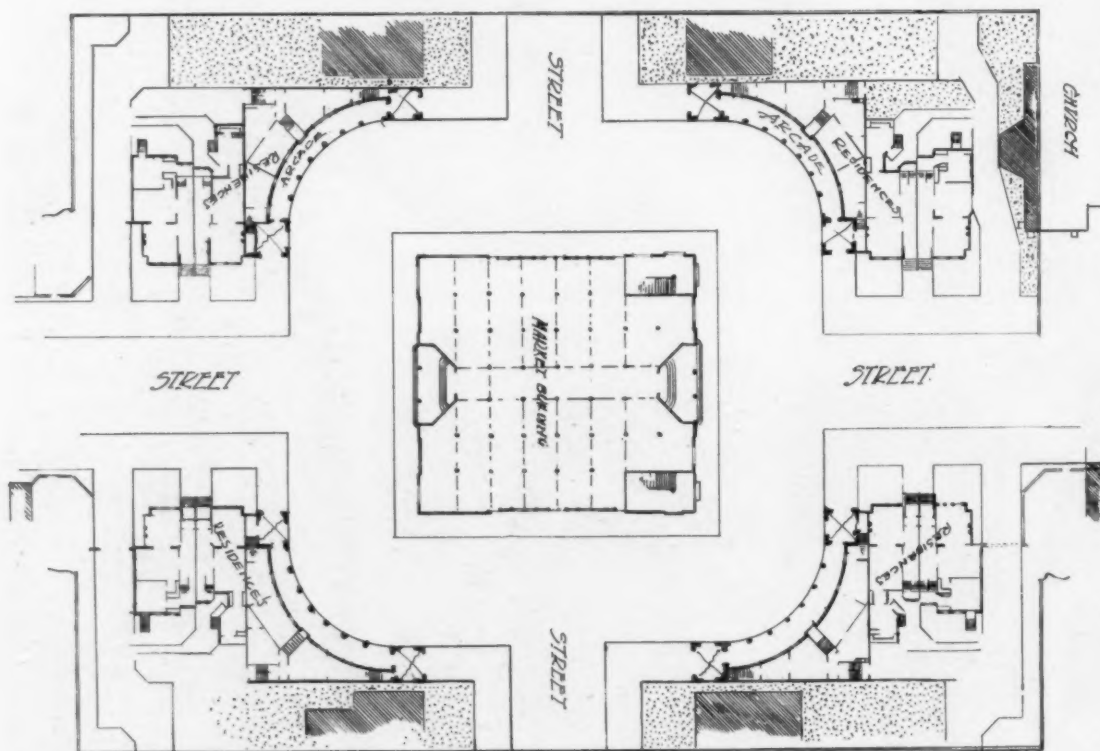
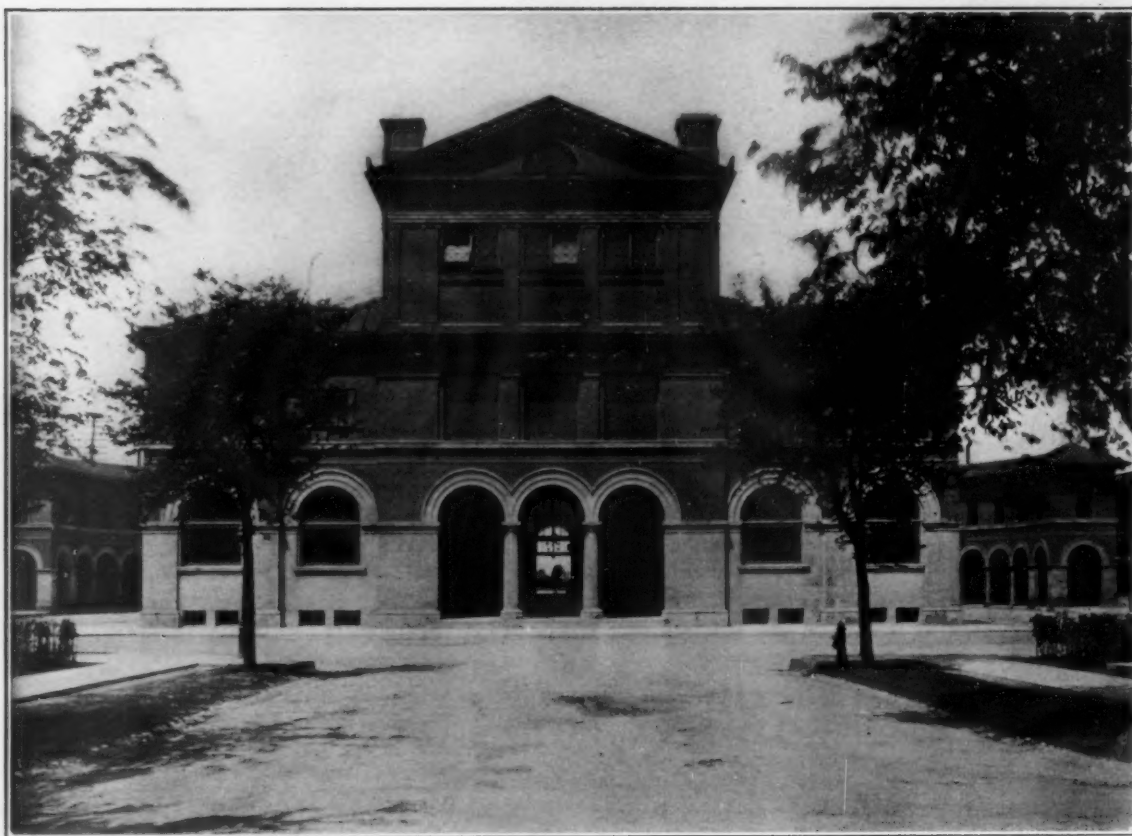
HOUSE OF G. L. WILLIAMS, ESQ., DELAWARE AVENUE, BUFFALO, N. Y.

McKim, Mead & White, Architects.



PORTE COCHÈRE AND STABLE: HOUSE OF G. L. WILLIAMS, ESQ., BUFFALO, N. Y.

McKim, Mead & White, Architects.



MARKET BUILDING, PULLMAN, ILL.

S. S. Beman, Architect.

The American Architect and Building News.
Regular Edition.

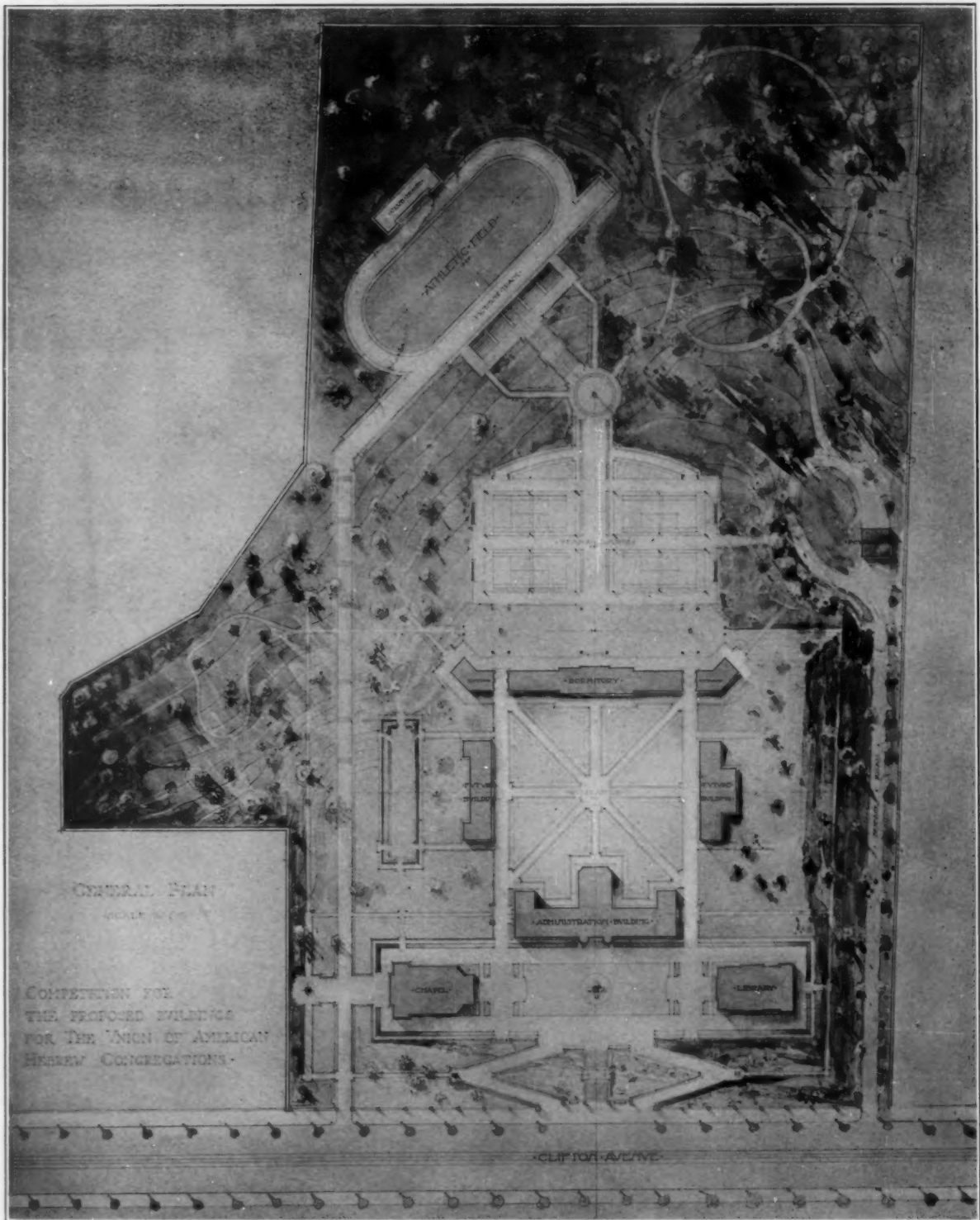
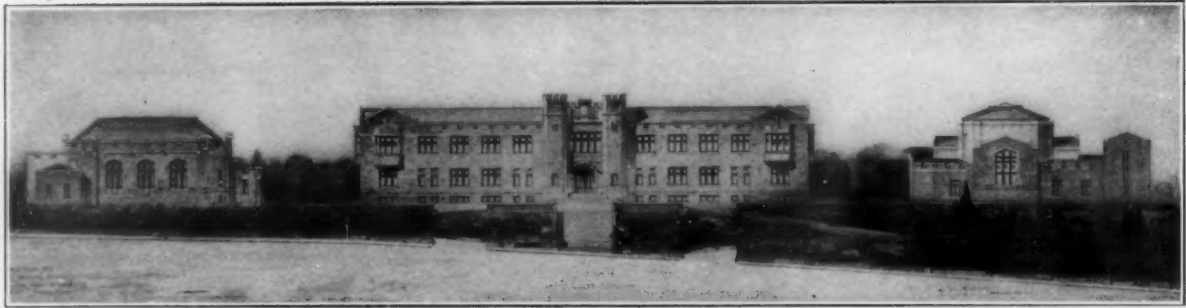
Volume XCI., Number 1626.
February 23, 1907.

Copyright, 1907, by The American Architect.



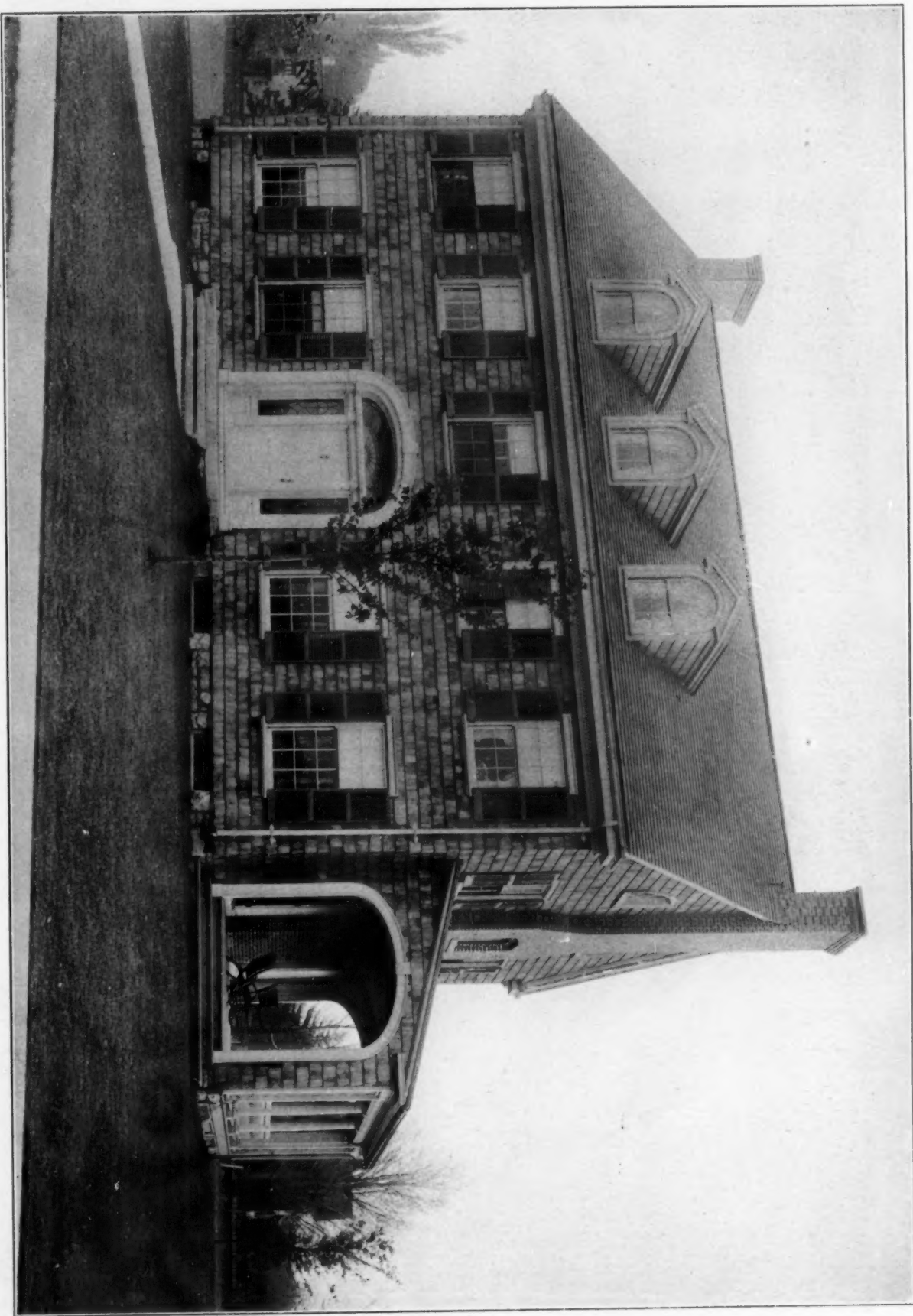
MARKET SQUARE, PULLMAN, ILL.

S. S. Beman, Architect.



ACCEPTED DESIGN FOR BUILDINGS FOR THE UNION OF AMERICAN HEBREW CONGREGATIONS, CINCINNATI, O.

A. Fechheimer and Harry Hake, Associate Architects.



HOUSE OF KENDALL B. CASTLE, ESQ., ROCHESTER, N. Y.

J. Foster Warner, Architect.

The American Architect and Building News.
Regular Edition.

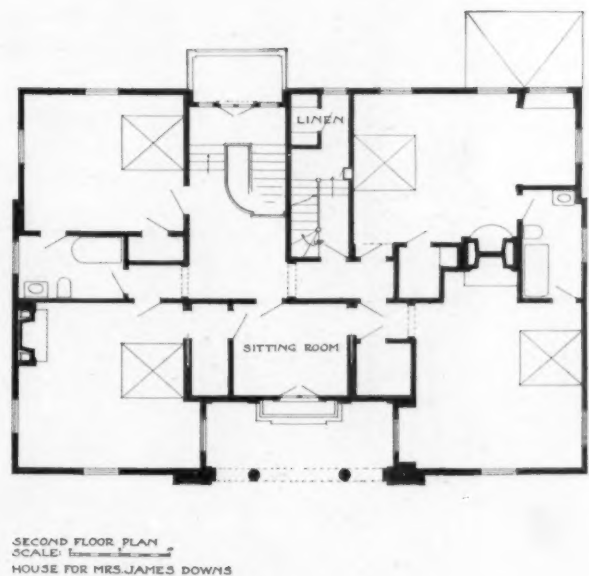
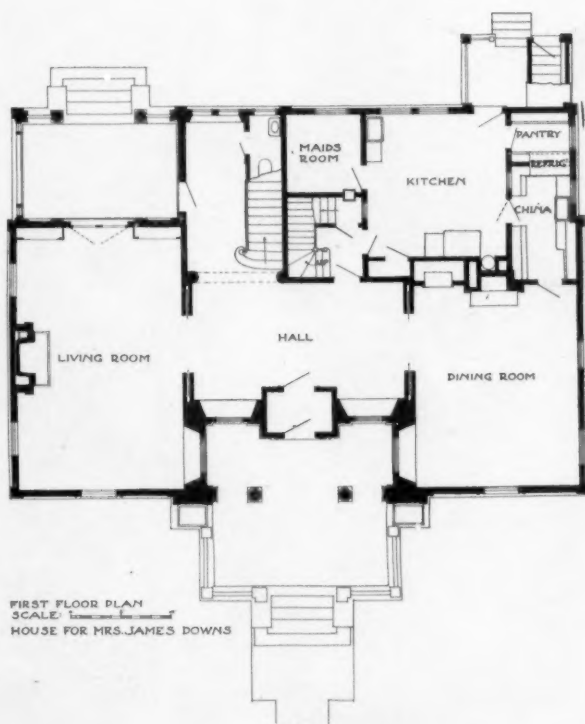
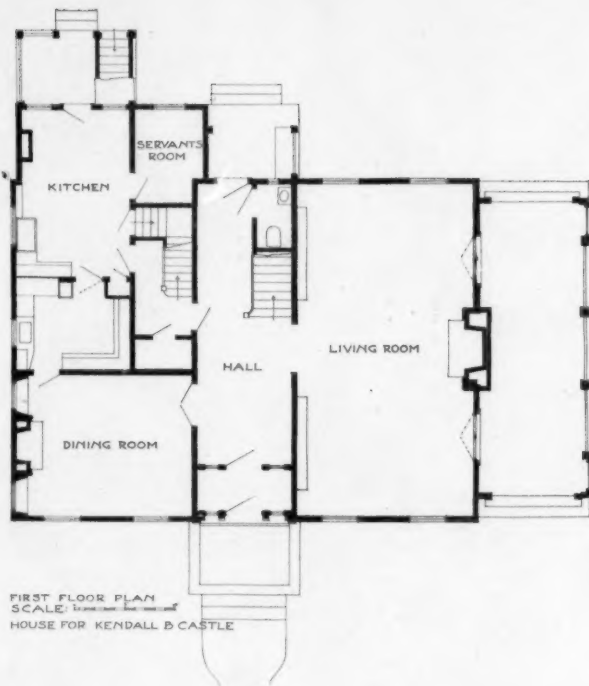
Copyright, 1907, by The American Architect.

Volume XCI., Number 1626.
February 23, 1907.



HOUSE OF MRS. JAMES DOWNS, BARKINGTON STREET, ROCHESTER, N. Y.

J. Foster Warner, Architect.



PLANS OF TWO HOUSES IN ROCHESTER, N. Y.

J. Foster Warner, Architect.

"In view of recent developments, we may await this issue with more patience and courage, for city after city has awakened to a sense of its lost opportunities in the past only to determine that those that lie in the future shall not be lost. Here at least we are reaping the benefit of the big exposition groups, and the lesson they taught of the value of concerted action, of standard dimensions and repeats, of a well-considered whole, in which the parts while admitting variety, yet conform to the general laws controlling the whole. Most of these are still in the condition of beautiful drawings embodying fine ideas; here and there one, as in Cleveland, is already taking form. While we may not expect the public to imitate or even fully understand these plans, we must for their development depend on the people for support, and unless our ideas are rational and practical, and the average man can see some return for his money—beauty is beginning to have its commercial value—we cannot advance far in the solution of broader problems.

"In our individual work where most progress has been made, our incursions into a variety of styles have resulted in a pretty generally diffused knowledge, a somewhat quick recovery from the strained effort to do something new and different, and a restrained sobriety among our best men which is having its influence in moulding taste throughout the country.

"On the whole, then, the general tendency of the best work in America is toward conservative lines, but in following this course one sees that intelligent use of precedent which shows that the stage of student and copyist is past, and that we are entering—slowly, but soberly and carefully—on the more responsible period of imaginative handling of well-understood laws. That we have learned that there are laws under which we work is a most important thing; once accept this, and we have gained that perfect freedom which is possible only to those who have learned to obey.

"The illustrations which are to be shown are necessarily very few, and cannot be considered even representative of the vast architectural field in the United States. You have perhaps noted that I have said no word as to the old French influence and its architectural records in Detroit, St. Louis or New Orleans, or of the Spanish work in California and on the Mexican border. These have had a strong influence, and especially the latter—the charming work of the Spanish monks on the Pacific Coast. Some of the slides will show modern interpretations of this.

"With the exception of the first few slides the work shown is nearly all quite modern. These few early slides are simply to show the kind of thing we had in colonial days, a type familiar enough in England, but very cleverly adapted for execution in wood here, and what we were doing in the early days of independence. The gloomy architectural period from then up to modern days might have been shown as a warning, but that no body of English architects needs."

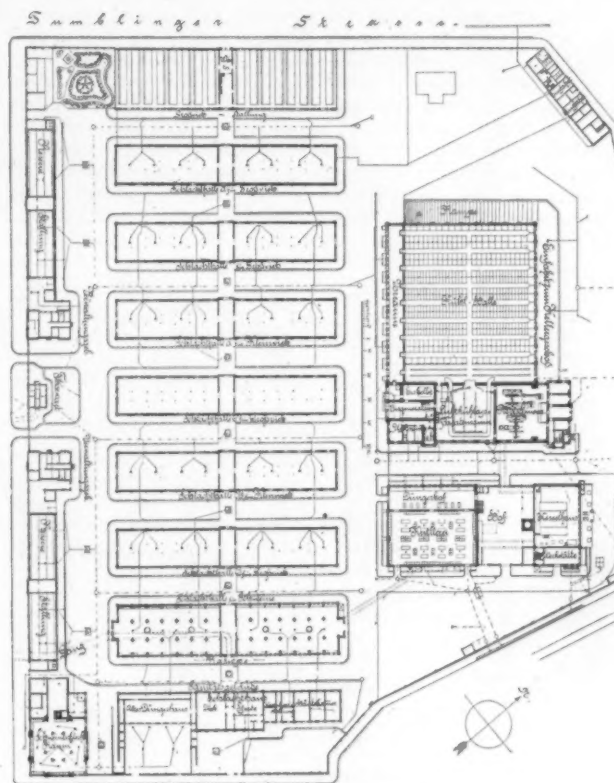
SANITARY FEATURES OF MARKETS AND ABATTOIRS.¹—IV.

LARGE public abattoirs are composed of a number of buildings. There must be large sheds, pens and stables for the housing of the animals which arrive; these buildings are sometimes subdivided into separate sheds for cattle, calves, sheep and pigs. They present no special features worth mentioning. Next, we have the buildings where the animals are killed, and in large establishments there are usually separate slaughter-halls for each group of the animals named. There must be also special buildings for the dressing of the carcasses, for the cleaning of the meat and the entrails, also buildings for the cold-storage of dressed meat, and special buildings must be provided for diseased or suspected animals. Then again, we have buildings devoted to the commercial utilization of the offal, such as fat-rendering and bone-boiling, and cremators or destructors for the condemned meat. An administration building should be provided containing the general offices, the rooms for the sanitary inspectors and veterinary surgeons, and laboratories for the microscopical examination of pork. There is usually provided a separate boiler and engine-house, containing also the power-plant, viz., the pumps for water-supply, the dynamos for lighting, and a complete refrigerating and ice-making plant. In rare cases a regular wholesale meat market forms a part of the abattoir. In European cities the bureau for the official inspection and control of the meat supply is considered of the highest importance, and a good deal of space is devoted to it. All the buildings named must be equipped

¹ Continued from page 61, No. 1623.

with the latest and best labor-saving devices, with all modern sanitary conveniences, and with impervious and properly-drained floors, while a liberal water-supply and other equipment facilitate the maintenance of cleanliness.

The value of the by-products of the slaughtering processes is nowadays recognized to be quite high; usually a considerable economy in the management of an abattoir may be effected by their proper utilization. The buildings in which the by-products, such as blood, hides, tallow, bones and intestines, are treated should be situated conveniently near and form adjuncts of the slaughter-houses proper. It is necessary that all these buildings should be kept under proper sanitary supervision. The noxious vapors and gases arising from the cans and kettles of rendering-establishments must be made to pass through condensing tanks and then under the fires of the boilers, and be finally discharged through the tall chimney-stack of the boiler-house.



LAYOUT OF CITY ABATTOIR, MUNICH, BAVARIA.

The correct grouping and location of the several buildings is important and depends somewhat upon the size and shape of the lot; it is also dependent upon the provisions available for good shipping connections. No general rules for the planning of abattoirs can be given, as each special case forms a problem in itself.

In general, three types may be distinguished. In the first of these the buildings are all concentrated, roofed over and interconnected by covered passages. This type requires a smaller floor-area and causes a reduction in the cost of construction; its compactness favors easy management and superintendence, but the drawbacks are that the building, as a whole, can only be enlarged with difficulty, and that there is often an insufficient supply of light and air. In the second type the different buildings are separated by open courts, streets or alleys, and each building may readily be enlarged if necessary, and light and air are provided in abundance. In the third type, which may be called a combination of the other two, the buildings are separated from one another, but interconnected by covered passages and courts, and this is probably in many cases the best system.

The majority of abattoirs are buildings of only one-story, the killing house being located at the ground level, while the by-products of slaughtering are stored in the cellar. There are, however, a few modern examples of buildings of many stories, and in these it is customary to take the cattle to be slaughtered to the highest floors, and then to locate the different processes

of dressing the carcasses, of cleaning the hides and of treating the offal on the lower floors. An example of this type of abattoir may be found in the new model slaughter-house built in New York City for the Butchers' Association and located at Eleventh Avenue and Thirty-ninth Street, described and illustrated in the *American Architect* of June 16, 1906.

Among the buildings forming a public abattoir, the one in which the slaughtering or killing of the animals and the dressing and chopping of the carcasses are done is of prime importance. The arrangement of the structural features of the killing-house or hall require, therefore, special mention. We may distinguish two different types. In the first type, which is the one most universally met with in German abattoirs, there is one large open and undivided slaughtering-hall in which all the different butchers work together, whereas in the second type there are provided two rows of smaller killing compartments, arranged one on each side of the central aisle, each compartment being rented out to one or to several butchers. This type of killing hall is the usual one in France, in Belgium and in Italy. The first described type is, however, very much preferable from a sanitary point of view, because it facilitates the official supervision of the slaughter trade, and necessarily to some extent involves a mutual inspection by the butchers. The first type is also cheaper in construction, for it does away with the many dividing walls of the compartments. For the different kinds of animals there are usually provided separate and distinct slaughtering-halls; hogs, in particular, are nearly always killed in special buildings.



LAYOUT OF TOWN ABATTOIR, SOLINGEN, PRUSSIA.

The outer walls of slaughter-houses may be built of either brick or stone, or else of iron, with glass sides and roofs. In the construction and finish of the interior, it should be borne in mind that there is a great deal of constant wear and tear in such buildings, and hence that the first consideration is the durability and strength of the building materials employed. Woodwork should be used as little as possible. On account of the slaughtering processes carried on in the buildings, it is quite essential that the inside walls to a height of six or seven feet from the floor should be rendered impervious, smooth and easily washed, so that dried blood and scraps of flesh adhering to them can be readily removed by means of warm water and soap. The walls may be faced with light-colored glazed brick, or else they may be tiled with white glazed tiles. In cheaper constructions the brick walls are coated with asphalt varnish, and any wooden posts or partitions should be treated in a similar manner.

The floors of a slaughter-house should be solid, non-absorbent and impervious to moisture of any kind; moreover they should be hard and durable, but they should not crack, nor should they be too smooth or slippery, as this would interfere with the operations of the butchers. It is somewhat difficult to reconcile these conflicting requirements. Asphalted and concreted floors have been much recommended, but on trial they have, in some buildings, proved to be only partly successful. Asphalt floors are apt to become soft in summer time; the cement floors, on the other hand, may crack, or they become chipped or broken by the axes of the butchers, and require constant repairs. In some cases roughened bluestone slabs have been used with success; another

good pavement is formed of two layers of hard-burned brick laid on edge in cement or in concrete, but this is necessarily expensive. Many butchers maintain their preference for a wooden floor, probably on account of its non-slipperiness, and notwithstanding its lack of durability and the fact that it absorbs organic impurities. Heavy planks of Georgia pine, caulked thoroughly watertight at the joints in the manner of a ship's deck, are satisfactory, but since the planks become rapidly splintered by the blows of the axe used in slaughtering or in dividing up the killed animals, it becomes necessary to put down a second layer of planks, in other words a double flooring, and to keep the same always in thorough repair. The floor should always be well graded and sloped to floor drains; sometimes special floor troughs or gutters are provided and arranged so as to catch the blood and to carry the same to special receptacles. The upper parts of the walls and the ceiling should be plastered or white-washed at frequent intervals. The roof may be pitched and covered with slate, or made flat and finished with metal or tar-and-gravel.

SANITARY FEATURES.

1. *Water-Supply.*—In centralized slaughter-houses enormous quantities of water are used during the day; hence one of the chief requirements is an abundant and very liberal supply of both hot and cold water. In Europe, where water is ordinarily not used as liberally or wastefully as in the United States, the supply required is estimated at 75 gallons per animal per day. While this figure includes the allowance for the watering and washing of the cattle, and for the washing of floors and the sprinkling of the roadways, it does not include the volume of water required for the condensers of the refrigerating-plant. This latter is estimated separately at 150 gallons for each head of cattle slaughtered.

The water-supply may be obtained from the mains of the city water-works, or else it may come from a separate local plant. Where the abattoir is located at some distance beyond the city limits, it often becomes necessary to provide a separate water-supply system, requiring one or several wells, a set of steam-pumps and one or several high-service water-tanks, or else pressure-tanks. A complete system of water-mains should be installed covering all buildings of the abattoir, so that water may be drawn at any place where it may be required for washing, flushing or other use. Provision should likewise be made for a good supply for fire-protection, including the setting of plenty of fire-hydrants. As the buildings are not very high, and as most of the water is drawn at taps located at the ground floor level, the water-tank for abattoir use need not be raised very high; but to obtain sufficient pressure at the hydrants for fire-extinguishing purposes, it is best to arrange for a separate elevated water-tank for fire-purposes, or else to use a large pressure-tank located in or near the power-house.

Sometimes the water distribution is so arranged that the city supply, where available, is used for fire-purposes, while the local supply covers all other water requirements.

In the buildings, the main supply-pipes should be ample in size, and should be carried either at the cellar ceiling, or else high up on the first floor, where the pipes are not so liable to be damaged. Numerous inside taps are required, not only at the troughs and other plumbing fixtures, but also for hose use.

Hot water is likewise required in large quantities, particularly at the places where the cleaning of the intestines is done; also for the baths and lavatories for the employees. It is best to arrange this by providing in the power-house a large hot-water tank or a feed-water heater heated by exhaust and by high-pressure steam.

2. *Drainage.*—For all abattoirs good drainage is very essential. In the main slaughtering-hall numerous vitreous-ware or solid porcelain-ware troughs should be provided for the use of the butchers, each of these having a trapped waste-pipe and connection with the main sewer of the building. The floors of the hall should have trapped floor drains at suitable points, and sometimes open gutters are provided, besides special troughs for the removal of the blood from the slaughtered animals.

The general rules on sewerage and plumbing, which have been formulated for other classes of buildings, are also applicable to slaughter-houses, hence it is superfluous to go into details.

Where the abattoir is composed of many buildings, a general sewer plan should be laid out. In many cases it will be found advantageous to provide two drainage-systems, one for storm water from the paved yards and roadways and for the roof drainage, and a second separate system for the waste-water from the buildings, including the toilet and bath rooms.

The main sewers are usually pipe-sewers, constructed of vitrified or glazed sewer-pipes, or where they are larger and egg-shaped, built of concrete. The sewer-pipes within the buildings should be of heavy iron pipe, and care should be exercised to give them a sufficient fall to prevent deposits and stoppages. All catch-basins, troughs and sinks should have efficient strainers, and flushing arrangements should be provided.

Man-holes should be placed at junctions and at changes in grade and alignment. The bottoms of the man-holes should be built on a level with the flow line of the sewer, and there should be no depressions or sumps in the bottom, which would collect and retain deposits of organic putrefying matters. All sewers should be ventilated in the most practical and efficient manner.

3. *Purification of the Waste-water.*—Although the waste-water from abattoirs is not nearly as highly polluted as that from some manufacturing establishments, yet it is necessary that it should be purified before being discharged into a water-course. In Europe one finds at many abattoirs purification plants for the sewage. In all such instances it is, of course, advisable to exclude the roof and yard drainage from the sanitary sewers.

The means used for purification are either mechanical, chemical or biological, and sometimes a combination of two methods is employed. Very often the plants comprise large settling-chambers or regular septic-tanks in connection with one or more tanks for chemical precipitation. Coke and gravel filters are also much used. The favorite method seems to be at present chemical precipitation, but more recently biological sewage-disposal methods have also been installed.

4. *Lighting.*—Good daylight illumination may be attained by providing the building with plenty of large windows; this is essential both for the maintenance of cleanliness and for the careful inspection of the meat. Artificial illumination is secured by means of either gas or electric light. If the city gas-mains extend to a point near the abattoir, gas lighting may be used; a separate gas-lighting plant is not recommended, except possibly an acetylene lighting plant. Steam being available in the power-house, it is easy to arrange for an individual electric-light plant.

5. *Toilet and Bath Rooms.*—There should always be provided the necessary number of well-kept and well-ventilated toilet-rooms, arranged entirely separate for both sexes. Modern abattoirs are also frequently provided with showers or rainbaths, for the use of the butchers' help. These should be placed in the vicinity of the large killing-hall. The details of the plumbing fixtures suitable for use do not differ from those in universal use in other manufacturing establishments.

6. *Heating and Ventilation.*—Artificial warming is not usually required for the large killing rooms, but the offices, toilet and bath rooms, the microscopical laboratories and restaurants, should be suitably warmed in winter. Low-pressure steam heating is therefore usually installed. High-pressure steam is required for disinfecting purposes.

7. *Maintenance of Cleanliness.*—A good water-supply and proper drainage facilities will be a great help towards maintaining the entire establishment in a decent and cleanly condition. In addition, there should be the very best arrangements for the prompt removal of all waste accumulations which attract both rats and flies; all offal, animal manure, fat, etc., should be removed quickly and regularly.

The maintenance of absolute cleanliness in every part of the buildings is of the greatest importance. Nuisances arise not only from the accumulation of filth on or about the premises, but likewise from imperfect or improper modes of disposing of the slaughter-house refuse. A prompt disposal of the manure from the cattle yards, the pens and stables is indispensable and should be carried out with regularity. All streets and alleys throughout the abattoir should be swept daily and washed frequently. The places or buildings in which diseased animals are kept require special disinfection.

8. *Equipment.*—The mechanical equipment of slaughter-houses comprises a great variety of machinery, such as movable and stationary hoisting cranes, lifts, tackles and hooks, by means of which the killed animals are suspended in order to dress them and cut them up; trucks and iron tanks placed on wheels are required for the removal of the hides and the offal, barrels are provided for the blood; there must also be weighing scales, tables and chopping-blocks. For the watering and flushing of the floors from the inside hydrants a large amount of rubber hose is required.

One of the most important parts of the mechanical equipment is the refrigerating or cold-storage plant, and a modern large abattoir can hardly be successfully operated without one. In

fact the success of large abattoirs began only with the introduction of the modern system of mechanical refrigeration, which enables the carcasses of animals to be chilled soon after killing, and which thus helps to keep the meat in a condition suitable for storage and transportation. It might be also mentioned that the development of the industry of shipping fresh dressed beef was largely due to the introduction of the refrigerator-cars on railways.

9. *Sanitary Inspection Service.*—The sanitary inspection service of abattoirs comprises three principal divisions, namely, first, the examination of the live-stock, before slaughtering, by veterinary surgeons; second, the inspection and microscopical examination of the meat of the slaughtered animals, and, third, the sanitary inspection of the buildings and of the sanitary conditions in which they are maintained. It is the duty of the veterinary surgeons to watch the arriving cattle with a view of preventing the spread of cattle disease. All suspected cattle should be at once separated and removed to pens specially designed for diseased animals.

The proper management of central abattoirs requires the strict enforcement of carefully drawn-up rules and regulations. In the Regulations governing meat-inspection, issued by the U. S. Department of Agriculture, on June 30, 1906, an attempt is made to cover to some extent the sanitation of the slaughtering premises. Considering the importance and the extent of the slaughtering industry of this country, the rules are not sufficiently elaborate or detailed, and they show a lack of technical knowledge; but they merit approval as being the first step in the right direction.

WM. PAUL GERHARD, C.E.

COMMUNICATION

COMPETITION FOR CONCRETE SUBURBAN HOUSES.

February 13, 1907.

TO THE EDITORS OF THE AMERICAN ARCHITECT:

Dear Sirs:—The Association of American Portland Cement Manufacturers is about to issue the programme of a prize competition for small suburban dwellings in concrete. As the programme has been prepared with care, I think you may be interested to print it in full in the next number of your paper.

It has been our purpose, while exacting the use of concrete for as large a part of each building as possible, to leave competitors free to use the material as their invention shall suggest, in combination with other materials or not, as they choose.

You will note that the prizes are generous—the first prize in each case being five per cent. on the cost of the building, in return for which only small scale drawings are required. It seems to be the necessity of the case that the designs should become the possession of the Association, which is apart from the practice followed in the case of drawings prepared for a specific building, but the amount and number of the prizes seem, to my mind, to warrant this, especially as the designer still has free use of his own design.

I am pleased to say that I have found, on the part of the Association, an admirable attitude of mind towards this competition; and in view of the recent discussions of the open competition, I think the publishing of the programme will be of interest to your general readers as well as to such of them as would care to submit designs.

Believe me,

Yours very truly,

E. V. SEELER.

PRIZE COMPETITION FOR DESIGNS FOR SUBURBAN DWELLINGS IN CONCRETE.

The Association of American Portland Cement Manufacturers invites designs for several classes of suburban dwellings, and offers prizes for the successful designs as herein set forth.

All designs will be judged by a Committee consisting of Edgar V. Seeler, architect, Philadelphia, Pa.; Louis H. Gibson, architect, Indianapolis, Ind.; Sanford E. Thompson, civil engineer, Newton Highlands, Mass., whose awards will be final and binding upon competitors and upon the Association.

Designs are to be for two classes: Class A—Single or detached dwellings. Class B—Twin or semi-detached dwellings.

In both classes the use of cement and concrete is desired, wherever practicable. Walls are to be constructed of hollow concrete blocks of plain, paneled or bush-hammered face, but not of rock-face; or they may be of monolithic construction. If hollow

blocks are used, interior plastering will be applied directly to the blocks; if monolithic construction, wall furring will be required. Wooden floor joists and roof timbers may be used; roof coverings may be of cement, tiles, slate or shingles. Concrete-block partitions, at least for the lower story, are preferred. Chimneys are to be of concrete blocks or brick; the use of cement for posts, cornices, porch railings and other details of simple design is suggested.

A prime requisite of domestic architecture, whether palace or modest dwellings, is that it should possess beauty, charm and appropriateness. The exterior finish of concrete walls has rarely been handled in a way to produce artistic results. The fault does not lie with the material, as it lends itself to a great variety of textures and colors.

The awards of this competition will be made with regard to, first, excellence in artistic quality; second, convenience of floor arrangements; third, economy of construction.

In each class, A and B, designs are desired for dwellings providing the following accommodations:

1. Three or four rooms, one or one and one-half stories in height, cost not to exceed \$2,000.

2. Five or six rooms, two stories in height, cost not to exceed \$3,000.

3. Seven or eight rooms, two or two and one-half stories in height, cost not to exceed \$4,500.

The number of rooms stated does not in any instance include bath-rooms, although bath-rooms are desired.

The costs stated do not include the plumbing and heating systems.

In Class B the sum stated is understood to be one-half the cost of the double or twin house.

A cellar is necessary under part or whole of house.

Each design must show the plans of all stories above the cellar, three elevations and a section—all at the scale of one-eighth-inch per foot. The competitor may substitute a perspective and one elevation for the three elevations, if he so desires.

Each design must be accompanied by a brief typewritten statement of materials and method of construction proposed, cubic contents and itemized cost based upon local prices of materials and labor. Cubic contents are to be calculated from the bottom of the footings, up through the entire building, and including porches.

Each design is to be drawn or mounted on white cardboard or Bristol board, not exceeding 18 inches by 24 inches in size. Designs must not be submitted in mats or under glass. The style of rendering is optional; lettering is to be plain Roman. The name and dimensions of each room, the general outside dimensions of the plan and the heights of stories are to be given, and each sheet may bear the title, "Competition for Suburban Houses in Concrete." The class and subdivision of each design is to be shown by lettering, such as "A 1," "B 2," etc., in the lower left-hand corner.

Drawings are to be inclosed flat, not rolled, and delivered to the Secretary of the Association of American Portland Cement Manufacturers, Land Title Building, Philadelphia, Pa., not later than April 1, 1907, and marked on the outside, "Competition for Suburban Dwellings in Concrete."

As the competition is to be conducted anonymously, no cipher or nom de plume, identifying name or mark shall appear on any drawing or wrapper, but each drawing shall be accompanied by a card, bearing the name and address of its author, sealed in a plain opaque envelope and addressed to the Secretary. Any competitor who shall in any way violate the anonymity of the competition will be excluded from all participation in the awards.

Each design and its accompanying envelope containing the name of the author will, when received, be given a number by the Secretary, and the design will be known by this number until after the awards have been determined.

There will be first, second and third prizes for each of the six classes of designs as follows:

A1 and B1, \$100, \$60 and \$40.

A2 and B2, \$150, \$100 and \$60.

A3 and B3, \$200, \$125 and \$60.

For each additional design awarded honorable mention, not to exceed six in number, \$25; not more than two honorable mentions may be awarded in any one class.

Any competitor may submit as many designs in one or all classes as he may choose, but each design must be wrapped and contain the sealed envelope the same as if submitted by another competitor. The same competitor will not be eligible to receive more than one prize, either first, second or third, in any one class,

but he may receive as many honorable mentions as the anonymous judgment of the Committee may award.

All designs receiving prizes or honorable mention shall become the property of the Association of American Portland Cement Manufacturers, which shall have the privilege of publishing them with the designer's name attached. Any designer receiving an award will be allowed to photograph or trace his design.

Designs receiving no award will be returned to their authors by the Secretary of the Association free of expense to the author.

No further information than that contained in this programme will be furnished to any applicant.

Additional copies of this programme may be had by applying to the Secretary of the Association, Land Title Building, Philadelphia.

ILLUSTRATIONS

HOUSE OF G. L. WILLIAMS, ESQ., BUFFALO, N. Y. MESSRS. M'KIM, MEAD & WHITE, ARCHITECTS, NEW YORK, N. Y.
PORTE COCHÈRE AND STABLE FOR SAME.

MARKET SQUARE, PULLMAN, ILL. MR. S. S. BEMAN, ARCHITECT, CHICAGO, ILL.

MARKET BUILDING IN THE SAME.

ACCEPTED DESIGN FOR THE BUILDINGS OF THE UNION OF AMERICAN HEBREW CONGREGATIONS, CINCINNATI, O. MESSRS. A. FECHHEIMER AND HARRY HAKE, ASSOCIATE ARCHITECTS, CINCINNATI, O.

HOUSE OF MRS. JAMES DOWNS, BARRINGTON STREET, ROCHESTER, N. Y. MR. J. FOSTER WARNER, ARCHITECT, ROCHESTER, N. Y.

HOUSE OF KENDALL B. CASTLE, ESQ., ROCHESTER, N. Y. MR. J. FOSTER WARNER, ARCHITECT, ROCHESTER, N. Y.

PLANS OF THE FOREGOING HOUSES.

Additional Illustrations in the International Edition.

PORTICO: HOUSE OF G. L. WILLIAMS, ESQ., DELAWARE AVE., BUFFALO, N. Y. MESSRS. M'KIM, MEAD & WHITE, ARCHITECTS.

NOTES AND CLIPPINGS

GÉRÔME'S "BELLONE."—Judge Hough, in the United States Circuit Court, recently reversed the finding of the Board of General Appraisers relative to the duty assessed on the celebrated statue by Gérôme, "La Bellone." The statue was imported by Tiffany & Co., in September, 1904. The government assessed the statue at 35 per cent. ad valorem, as manufactured ivory and bronze, and from this the importer appealed, contending that as a work of art it was, under the reciprocal agreement with France, entitled to admission at a duty of 15 per cent. The statue is said to be worth somewhere between \$30,000 and \$50,000. An attempt was made by France to buy the statue from the sculptor's widow, and an offer of 100,000 francs was made, which she declined. Later Tiffany & Co. bought the statue, and, owing to the litigation, "La Bellone" is still in their possession, although it is said that many offers have been made for the work.—*Exchange*.

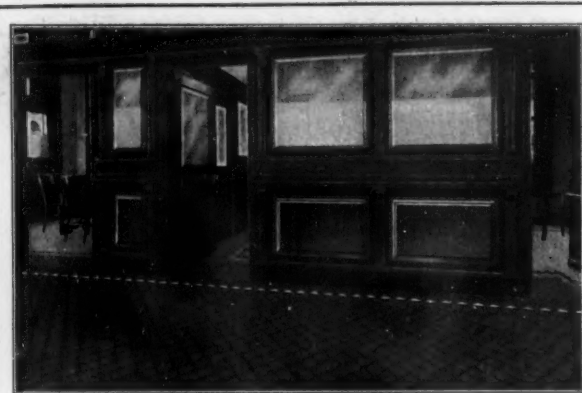
TURKEY AND THE ARCHAEOLOGISTS.—Sultan Abdul Hamid, taking a leaf out of the book of the King of Italy, has issued an edict strictly prohibiting, under all sorts of pains and penalties, the removal from Turkish territory of all objects in the shape of archaeological treasures and antiquities. The terms of this law have been communicated by the Porte to the various foreign embassies and legations at Constantinople, and it is expressly stated, by order of the Sultan, that no exception will be made to it, and that the Turkish Crown will enforce its ownership of all antiquities and art treasures excavated from Turkish soil. There are now several American and German exploring parties who are engaged in costly excavations on the sites of Babylon and of Nippur, where so many of the cuneiform tablets, with their records of Assyrian history, have already been discovered. These excavations have been carried on until now by virtue of firmans obtained from the Sultan. But these firmans are explicitly repealed by the action of the new law.—*N. Y. Tribune*.

INTERLOCKING RUBBER TILING

Made in One Quality Only—THE BEST

Noiseless, non-slippery, sanitary and extraordinarily durable, the finest floor that can be laid in business offices, banking rooms, court rooms, vestibules, halls, billiard rooms, cafes, libraries, churches, hospitals and hotels. It is specially adapted for steamships, yachts, etc., standing, without cracking or separating, the

Manufactured under our Patent and sold only by us and our Authorized Agents. BEWARE OF INFRINGERS



As laid by us in the office of the Empire Trust Co., 42 Broadway, N.Y. City

straining and racking of the ship. Each Tile is interchangeable and distinct, but shaped so as to lock firmly into the surrounding Tiles. The interlocking feature produces a solid rubber floor, unlimited in size or shape, with all the durability of the hard tile, without its liability to damage.

Estimates, Designs and Samples furnished on application. Send for Special Catalogue

PATENTED AND MANUFACTURED SOLELY BY

NEW YORK BELTING & PACKING CO., Ltd., 91-93 Chambers St., New York City

Philadelphia, 116-120 N. Eighth St.; Chicago, 150 Lake St.; San Francisco, Oakland, Cal., 918 Broadway; Boston, 232 Summer St.; Buffalo, 600 Prudential Building; Pittsburg, 528 Park Building; Indianapolis, Ind., 229 South Meridian St.; St. Louis, 218 Chestnut St.; Baltimore, 114 West Baltimore St.; London, Eng., Arthur L. Gibson & Co., 19 to 21 Tower St., Upper St. Martin's Lane, W. C.

POSITIONS OPEN.

WANTED—Two architectural draughtsmen; a permanent position and good salary offered. J. Walter Stevens, 905 New York Life Bldg., St. Paul, Minn. (1626-1629)

MECHANICAL ENGINEER, familiar with the details of heating, lighting and ventilation of office and factory buildings, can be put in touch with an excellent proposition by writing to N-7230, Engineering Agency, Chicago.

POSITIONS WANTED.

ARCHITECTURAL engineer, college graduate, capable of working out complete set of plans, general specifications, plumbing, superintendence for high-class buildings, now having charge of draughting room of prominent architect, wishes to change. Would accept outside work from architects desiring speedy and economical solutions of complications in building construction. Address T-A, care American Architect. (1625-1626)

DESIGNER (English)—Gothic Renaissance, etc., desires evening, office or home work. Perspective landscape, interiors, furniture; high class working details; with view to future engagement. Address "S-B," care American Architect. (1623-1626)

THOROUGHLY reliable man, with long and varied experience in building construction, as draughtsman, superintendent, specification writer and chief assistant, would like a responsible position in charge of large work. Address P. O. Box 3, Montreal, Canada. (1624-1627)

ARCHITECTURAL designer and draughtsman, thoroughly competent in all branches of office work, qualified to take charge of the draughting-room, and having a high-grade experience and a University and Beaux-Arts training; an engagement in New York preferred. Address "Doric," care American Architect. (1626-1627)

DESIGNER—Experienced, reliable man, Gothic, Renaissance, perspective, landscape, interiors, etc., wants position, charge of office preferably. Address "S-B," care American Architect. (1626)

FIRST-CLASS all-around draughtsman and superintendent; twenty years' experience; good on design and construction; specifications and details. Address "Competent," care American Architect. (1626)

THE USE OF TILE

U

WRITE TO

THE INFORMATION BUREAU

OF THE

TILE INDUSTRY

70 CORCORAN BUILDING

WASHINGTON, D. C.

"RENAISSANCE FIREPLACES."

40 Gelatine Plates, on bond paper, 9" x 11".

In Envelope, Price \$5.00.

THE AMERICAN ARCHITECT, Publishers.

POSITIONS WANTED.—Continued

PARTNERSHIP WANTED—A young architect with technical education and 9 years' practical training with New York architects of recognized ability, and who is thoroughly conversant with all branches of the office work, on country as well as large city buildings, wishes to form partnership in a fair sized Eastern city, with an established architect; particularly adapted to handle the outside end of the business, and having a practice that could be increased by good team work. Address "8-A," care American Architect. (1626-1628)

PROPOSALS.

Treasury Department, Office of the Supervising Architect, Washington, D. C., February 12, 1907.—Sealed proposals will be received at this office until 3 o'clock p. m. on the 21st day of March, 1907, and then opened, for the construction, complete, of the U. S. Post Office at Owosso, Michigan, in accordance with the drawings and specifications, copies of which may be had at this office or at the office of the Postmaster at Owosso, Michigan, at the discretion of the Supervising Architect.—James Knox Taylor, Supervising Architect. (1625-1626)

Treasury Department, Office of the Supervising Architect, Washington, D. C., February 6, 1907.—Sealed proposals will be received at this office until 3 o'clock p. m. on the 27th day of February, 1907, and then opened, for an electric passenger elevator in the U. S. Post Office and Court House at Ogden, Utah, in accordance with drawing and specification, copies of which may be obtained at this office at the discretion of the Supervising Architect.—James Knox Taylor, Supervising Architect. (1625-1626)

Treasury Department, Office of the Supervising Architect, Washington, D. C., February 13, 1907.—Sealed proposals will be received at this office until 3 o'clock p. m. on the 23d day of March, 1907, and then opened, for the construction (except elevators, heating apparatus, electric wiring and conduits, nests of metal-front post office boxes and letter drops in screens, and interior lighting fixtures) of the U. S. Post Office and Court House at Green Bay, Wisconsin, in accordance with the drawings and specifications, copies of which may be had at this office, or at the office of German & Lignell, Architects, Duluth, Minn., at the discretion of the Supervising Architect.—James Knox Taylor, Supervising Architect. (1626-1627)

A "Monocaste" Cottage



ABSOLUTELY FIREPROOF
NO WOOD EXCEPT THE TRIM

Artistic and Rustic Finishes

WE will co-operate with architects who wish to use reinforced concrete for constructing COTTAGES, VILLAS, LIBRARIES, ETC., furnishing them with details for moulds and reinforce, and complete instructions to guide them in executing their own plans. This construction is attracting the widest attention.

W. N. WIGHT & CO.

Designing and Contracting Engineers
160 Fifth Avenue, New York

Unsightly Coal Windows

ARE EYESORES

The Majestic Coal Chute

A sure cure for
Smashed Sash,
Broken Glass,
Splintered Siding,
and Soiled Foundation.

No. 1.
19x15, \$8.00
No. 2.
24x15, \$10.00
No. 3.
30x20, \$15.00

Freight allowed to points east of the Mississippi River.

Made of heavy wrought steel, and has an adjustable hopper, which



Pat. Oct. 16, 1906.

swings into the chute, allowing the door to close flush with the wall. Also has a self-locking device for holding door open and for locking when closed. Can be placed in old walls as well as new. Write for Catalogue.

THE CHAPPELL FURNACE COMPANY
MORENCI, MICH.

ARCHITECTS : ARCHITECTURAL DRAFTSMEN

Are Wanted for the following positions:

Architect; West. Must be high-grade designer of high office buildings, with six or more years' experience on such work; \$3,600 or better, according to man. F7206

Arch. Draftsman; Northwest; for railroad; \$90; also specification man at \$115. F7190

Arch. Draftsman; Northwest; general work; prefers good, clean American; permanent position; \$25-\$30. F7172

Arch. Draftsman; South; capable taking charge small office; good in design, scale and detail drawings and thoroughly familiar with construction work on school houses, court houses, office and bank buildings, churches, etc.; chance for advancement and good salary to right man. F7170

Arch. Draftsman; Maryland; general work; capable of making working drawings from rough sketches and detailing under supervision; \$20. F7171

Arch. Draftsman; Indiana; good all-around man; no designing; \$25-\$40. F7169

Arch. Draftsman; Illinois; church work; \$100-130. F7166

Arch. Draftsman; Pacific Coast; to take charge of office employing three or four men; must assist in designing and work as draftsman when necessary; \$40 per week and expenses out to right man. F6824

Arch. Draftsman; Mexico; experienced in designing and construction; good at perspective work; permanent; healthy; \$200 Mexican currency to start. F6717

Other places in Illinois, Pennsylvania, New York, California, Southern States, etc., etc.

Engineering
Agency, Chicago:

Please send latest
copy of the Engineering
Agency Weekly Bulletin.
I am interested in position
No. mentioned above.

Full particulars of experience attached.

Name

Address

Write for particulars, stating experience fully. Send coupon for latest copy of Weekly Bulletin, listing up-to-date vacancies every week.

THE ENGINEERING AGENCY, Inc.

ESTABLISHED 1893

Monadnock Block

Chicago, Ill.



The above new trade-mark on the side of our White Lead kegs, all brands, will be a great aid to architects, superintendents and inspectors in making sure that a National Lead Co. brand is being used as specified.

See that *all* the original packages are brought to the premises and the paint mixed there. It is not infrequently the case that a single hundred-pound keg bearing National Lead Co. brand has to stand sponsor for a whole job requiring from 25 gallons of paint upward. There should be a 100-pound keg (or its equivalent) for every 8 gallons of paint.

*We guarantee our White Lead
to be absolutely pure.*

NATIONAL LEAD COMPANY

Largest Manufacturers of
White Lead in the World.

New York Boston Buffalo Cleveland Cincinnati Chicago St. Louis
Philadelphia (John T. Lewis & Bros. Co.) Pittsburgh (National Lead & Oil Co.)

Natural asphalt is the only perfect water- proofing for a roof.

Coal-tar and other residual pitches first dry out in the sun and air and become brittle; then crack with the contraction and expansion of the building or from other causes.

Then the water gets in.

Genasco products, made from the famous Trinidad Lake Asphalt, do not dry out in the sun and wind. They do not go to pieces in any kind of weather, nor do they yield to acids, alkalies, gas-fumes, etc.

GENASCO

Asphalt Roofing Cement
Asphalt Saturated Felt
Asphalt Waterproofing Cement
Asphalt Tile Cement
Send for samples and information.

THE BARBER ASPHALT PAVING COMPANY

Largest producers of asphalt in the world
PHILADELPHIA

New York San Francisco Chicago

The Genasco Roofing Company (Philadelphia, New York, Chicago, with branches in other large cities) executes contracts throughout the United States, using Genasco asphalt materials.

176 Seventh Street and Sedgwick Avenue. Plans provide for twelve-story building, measuring 100x84 feet, to contain lofts. It will be built of brick, stone and iron, and have steam heating, electric lighting, elevators, etc.

OKLAHOMA, OKLA.—It is reported that plans are being prepared for the \$300,000 depot which is to be erected here by the Frisco-Rock Island systems. J. B. Berry, Chief Engineer, Chicago, Rock Island & Pacific Railway Company, Chicago, Ill.

OMAHA, NEB.—The Omaha Rubber Company is considering the erection of a block to cost about \$60,000.

OTTAWA, ONT.—Competitive plans, from Canadian architects only, are to be received, according to reports, until July 1 (extension of date), by the Minister of Public Works, for new departmental buildings. It is proposed to erect two five-story buildings, one for the Department of Justice, the Railway Commission, and the Supreme and Ex-

chequer Court and the other for the departmental offices.

PALMS, CAL.—F. P. Burnham, of Los Angeles, is reported to have prepared plans for a 300-room hotel which the Palms Land, Light & Power Company intends erecting here.

PARIS, ILL.—The erection of a hospital is reported under consideration. Mayor T. C. McCord may be able to give further information.

PARIS, TEX.—The Elks' Lodge, it is stated, contemplates the erection of a lodge building and opera house to cost \$50,000.

PATCHOGUE, L. I., N. Y.—The Board of Education is reported to have adopted plans prepared by D'Oench & Yost, of New York, N. Y., for the \$50,000 sixteen-room school which is to be erected at Bailey and Bay Streets.

PHILADELPHIA, PA.—Bernard Fischer is said to be contemplating the erection of a seven-story brick, stone and terra cotta

apartment-house at 1632 Arch Street, to cost about \$125,000.

Clepper & Moffitt, 339 Fifth Avenue, it is stated, have prepared plans for a warehouse to be erected in the Shadyside District at a cost of about \$400,000.

Plans have been prepared and estimates are being received, according to reports, for an eight-story store and office-building to be erected for the Denckla estate at Eleventh and Market Streets, at a cost of about \$300,000.

Plans and detailed specifications have been prepared by George W. Rehfus, architect, for the new skating rink to be built for Walter Benkus, at the southeast corner of Broad and York Streets. Designs show



Plastic Relief Mfg. Co.

298 N. Halsted St., Chicago, Illinois

Manufacturers of
Exterior and Interior

Composition Capitals, Brackets and Ornaments

MODELS FOR WOOD AND STONE CARVING.
CEMENT AND METAL CASTINGS.

Write for Catalog.

ARCHITECTURAL ORNAMENTS

OF THE HIGHEST ORDER

Papier-Mache, Compo, Staff and Plaster

also

Wood Carving and Modeling



CHARLES EMMEL

(ESTABLISHED 1884)

383 Albany St., Boston, Mass

Cornices, Modillions, Friezes,
Capitals, Consoles, etc.

Models made for Wood and Stone
Carving, Cement and Metal Castings

EXECUTING WORK FROM ARCHITECTS' DRAWINGS IS OUR
SPECIALTY

one-story building, measuring 150x250 feet. It will be built of brick, stone and iron, fireproof, and have all modern improvements.

A business building will be erected at 914 Walnut Street, by Mershon Brothers. Plans provide for ten-story building, 24x142 feet. It will be built of brick, stone and iron, fireproof, and will have steam heating, electric lighting, elevators and all modern appliances. Approximate cost, \$120,000.

It is stated that plans are being prepared for a residence to be erected by Oliver Bair. Cost, \$100,000.

PINE BLUFF, ARK.—A Pythian hall, to cost about \$125,000, will be erected at Second and Olive Streets.

The School Board is reported to have secured a site and will ask plans and specifications at once for a high school, which is to cost about \$75,000.

PITTSBURG, PA.—The proposition to build a municipal hospital was adopted by the Select Council. The proposition includes an appropriation of \$500,000.

Plans are being considered for a manual training school in the Seventeenth Ward. Cost, about \$60,000.

St. Xavier's Academy, Beatty Station, Pa., will build a new mother's house in Fifth Avenue, Pittsburg. Cost, \$200,000.

A. S. Hunt is reported to be contemplating the erection of a residence in Fifth Avenue, near Woodland Road, to cost \$75,000.

RALEIGH, N. C.—Hon. John C. Drewry has introduced a bill in the Legislature appropriating \$500,000 for additions and al-

terations to Capitol building. Plans for this improvement, recommended two years ago, were prepared by Frank P. Milburn & Co., Washington, D. C. Improvements contemplate adding a wing to each end of present building, installing heating plant and elevators and putting a new dome on present building.

RED JACKET, MICH.—It is reported that the Pabst Brewing Company, Milwaukee, will erect a four-story hotel here.

RIVERSIDE, PA.—William Steele & Sons Company, of Philadelphia, it is reported, have been awarded a contract by the Philadelphia Watch Case Company, to erect a seven-story brick and terra cotta office building, 75x80 feet, and a six-story brick, concrete and terra cotta factory, 68x313 feet, at Riverside, to cost \$400,000.

ROCHESTER, N. Y.—The Germans, it is stated, are contemplating the erection of a hospital at a cost of \$75,000.

ST. FRANCIS, WIS.—Rev. Louis Peschong, procurator, will give information about a \$50,000 library and gymnasium to be erected for St. Francis Seminary, St. Francis, near Milwaukee.

ST. JOSEPH, MO.—Reports state that plans are being prepared for a City Hall to be erected at a cost of \$200,000.

ST. LOUIS, MO.—Plans are being prepared, according to reports, for a six-story building which Zach W. Tinker intends erecting at Walnut and Moore Streets, at a cost of about \$300,000.

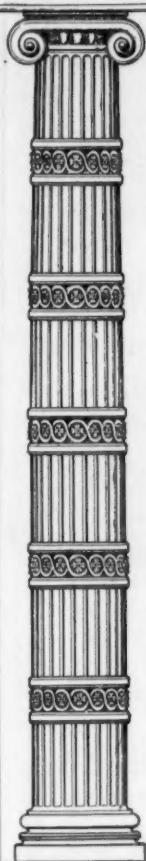
Barnett, Haynes & Barnett, architects, Frisco Building, are preparing plans and will take bids in the spring for a Roman Catholic Cathedral, 212x400 feet, to be

erected at Lindell Boulevard and Newstead Avenue. Granite or stone, plate glass, hard plaster, marble and tile work, electric light fixtures, nickel plumbing, etc., will be used. Estimated cost, \$1,000,000. The Rev. John Joseph Glennon, 3810 Lindell Boulevard, is Archbishop of the Diocese of St. Louis.

A. B. Groves will, it is said, prepare plans for a Masonic Hall for the Tuscan Hall Association. Estimated cost, \$75,000.

The National Bank of Commerce will begin construction of a banking building in May. The structure will be sixteen stories high, and it will front a whole block on Broadway, from Olive to Pine Streets. The building and ground, exclusive of special decorations in the main banking-room, will cost about \$6,000,000. Plans for the building have been drawn by Mauran, Russell & Garden, 1620 Chemical Building. The building will be constructed of steel and gray granite. At the eleventh story there will be a bronze balcony, extending along the front and sides of the building. The mansard roof probably will be of tile. The main entrance, at the centre of the block on Broadway, will be 55 feet wide and 30 feet high. It will extend back to the alley. From Olive to Pine Streets a corridor 14 feet wide will run through the rear of the building. The elevators, eleven in all, will be ranged along this corridor, at the end of the passage, 55 feet wide, from the main entrance.

According to the St. Louis Post Dispatch, the plans for the Coliseum and group of commercial buildings which are to be constructed at corner of Washington and Jefferson Avenues, are now complete and prob-



The
Northwestern
Terra Cotta Co.
CHICAGO
manufactures the
Highest Grades of
ARCHITECTURAL
TERRA COTTA
ENAMELED
WORK
A SPECIALTY

FLORIAN

is the cleanest deadening felt made



The church where Pres. Roosevelt attends—Grace Reformed Church, Washington, D.C. Both Florian Sound Deadening Felt and Neponset Waterproof Paper were used in this church.

The vermin proof qualities of a deadening felt are more important than the insulating qualities. Ordinary deadening felts are made from dirty rags and street sweepings, attracting vermin of all kinds. Florian is made from clean stock which is boiled under pressure of steam and thoroughly washed so as to get clean, antiseptic results.

Remember that one sheet of Florian is equal to six sheets of ordinary deadening felt.

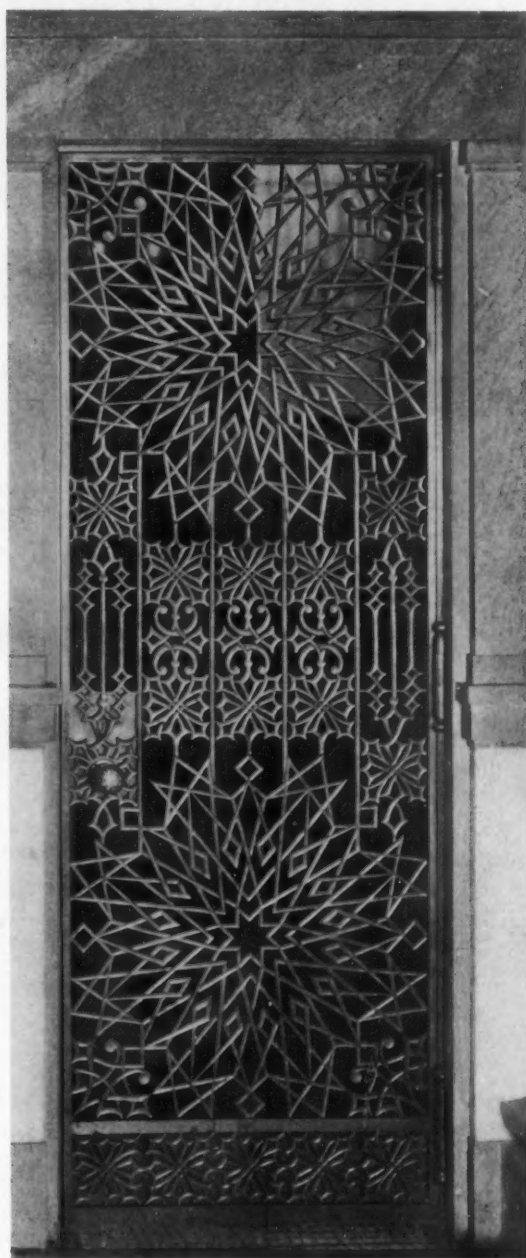


F. W. BIRD & SON, Makers

Established 1817

EAST WALPOLE, MASS.

NEW YORK CHICAGO WASHINGTON
Canadian Factory and Office: Hamilton, Ont



BRONZE DOOR, TRUST DEPARTMENT

SUPERIOR SAVINGS AND TRUST CO

Rockefeller Building, Cleveland, Ohio

KNOX & ELLIOTT, Architects

The Winslow Bros. Co.

Ornamental Iron and Bronze

CHICAGO

NEW YORK.

MASON SAFETY TREADS For Stairs, Wood, Iron, Marble or Cement, new or old
Hundreds of thousands in use
Am. Mason Safety Tread Co., Boston

J.W. TAYLOR'S Photograph Series of American Architecture
324 Dearborn Street, CHICAGO, ILL.

PERSPECTIVES RENDERED
In Pen-and-Ink and Water-Color
WALTER M. CAMPBELL,
8 Beacon Street, Boston, Mass.

E. ELDON DEANE
Architectural Colorist and Draughtsman
63 Seymour Building, Fifth Ave. Cor. 43d St.
NEW YORK CITY

FREDERICK B. WIRT
PERSPECTIVES
84 Adams St., Care Chicago Arch'l Club, CHICAGO, ILL.

ably will begin to take form in the course of a month. In its general plan the new Coliseum will follow the design and arrangement of the old one, now being wrecked, the chief difference being in the disposal of the seats, the addition of a movable stage and the inclusion of a swimming pool in connection with the racing courses and arena. The theatre is to have a main entrance on Washington Avenue. The hotel will face Jefferson Avenue, the main entrance being about midway between Locust Street and Washington Avenue. It will contain 115 rooms. There will be 24 stores facing on Locust Street, Jefferson Avenue and Washington Avenue. The Coliseum will have a general entrance on Washington Avenue, an entrance for vehicles and horses on Locust Street, and an exit from the west side into a private alley, running half the length of the block south of Washington Avenue.

ST. PAUL, MINN.—Kees & Colburn, of Minneapolis, it is stated, are preparing plans for improvements to be made to the Orpheum Concert Hall at Cedar and Eighth Streets, at a cost of \$100,000. D. J. Bondy, manager.

The American Hoist & Derrick Company contemplates the erection of additional buildings to its plant, to cost \$100,000.

SAN JOSE, CAL.—Plans for the new \$175,000 High School provide for a group of five buildings, the five largest grouped about a central executive building, in which will be located the Assembly Hall, and there will be two entirely enclosed courts, and one open court; plans have also been prepared for a \$50,000 Grammar School, and for remodeling of two old Grammar Schools. F. S. Allen, Pasadena, architect.

SCRANTON, PA.—Harvey J. Blackwood, 136 North Washington Street, it is stated, has prepared plans for a museum of natural history and science which Dr. I. F. Everhart has decided to present to the city. He is also to prepare plans for a museum of art which Dr. Everhart also intends presenting to the city. The cost of the buildings, including the endowment, will be about \$250,000.

SEATTLE, WASH.—Edwin F. James, it is stated, will erect a seven-story apartment-house at Ninth Avenue and Madison Street, to cost about \$90,000.

It is stated that plans have been prepared by W. P. White, Washington Build-

—WATER—

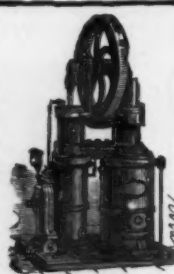
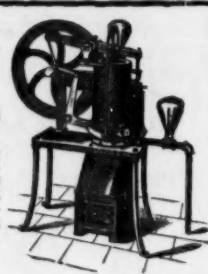
Rider & Ericsson
Hot-Air Pumping Engines

If water is required for household use, lawn, flower beds or stable, no pump in the world will pump it so safely, cheaply and reliably. No danger, as from steam. No complication, as in gasoline engines. No uncertainty, as in wind-mills. Prices reduced. Catalogue "B" on application.

RIDER-ERICSSON ENGINE CO.

35 Warren Street, New York.
239 Franklin Street, Boston.
234 Craig Street, West Montreal, P. Q.
22 Pitt Street, Sydney, N. S. W.

40 Dearborn Street, Chicago.
40 North 7th Street, Philadelphia.
Amargura 96, Havana, Cuba

Expanded Metal For Fireproofing and Concrete Construction

ASSOCIATED EXPANDED METAL COMPANIES

Room 1205, 256 Broadway, New York



LUFKIN

STEEL TAPES AND RULES

ARE INDISPENSABLE FOR ACCURATE WORK

Made by **THE LUFKIN RULE CO.**

FOR SALE EVERYWHERE.
SEND FOR CATALOG

Saginaw, Mich., U. S. A.
New York. London.

The Illuminating Engineering Department OF THE

HOLOPHANE COMPANY

IS AT YOUR DISPOSAL.

227-229 Fulton St., New York

ing, for \$75,000 apartment-house to be erected by Fouts & Williams.

The Wilson & White Hotel Company is reported incorporated with a capital of \$1,000,000, by M. W. McClintock White, of Butte, Mont., and Seattle, and Charles Perry, of Seattle, to erect a twelve-story hotel on Western Avenue and Columbia Street, to contain 750 rooms.

Graham & Myers, Lowman Building, are reported to have prepared plans for a three-story brick family hotel, which it is proposed erecting on Eighth Avenue and University Street, at a cost of \$65,000. Hardman Bros., owners.

Graham & Meyers, Lowman Building, are reported to have prepared plans for an apartment-house to be erected at East Union and Thirteenth Streets, by Meacham & Vansant, at an approximate cost of \$200,000.

Plans are reported completed for a fifteen-story steel building which the Ferry-Leary Land Company intends erecting on Second Avenue and Madison Street.

F. G. Wynquist, it is reported, has accepted plans for a four-story apartment-house to be erected at an estimated cost of \$50,000.

SEWELLS POINT, VA.—Plans are being prepared by Fritz Muller & Sons, Omaha, Neb., for a building for the Jamestown Exposition grounds to be known as the Alps. Cost, \$50,000.

SHREVEPORT, LA.—L. S. Green, of Houston, Tex.; John M. Dortch, of Shreveport, and McLemon & Oudenhofer, of Shreveport, received first, second and third prizes, respectively, in competition of plans for new City Hall, which will cost about \$75,000.

TACOMA, WASH.—It is reported that Peter Sandberg is having plans prepared for a ten-story steel and concrete business building, to be erected at Fifteenth Street and Pacific Avenue, at a cost of about \$250,000.

It is reported that Frederick Heath, architect, is preparing plans for a fifteen-story building, to be erected on St. Helens Avenue.

Press reports announce that A. McElroy, of Seattle, and others, will erect a ten-story hotel building here, to cost \$250,000.

The erection of a ten-story hotel at A and Ninth Streets, is reported under consideration. Probable cost, \$250,000. George Stevenson, of Seattle, Wash., may be able to give further information.

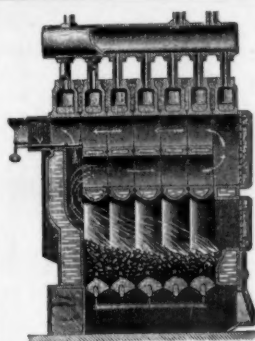
Truss Lath

The Truss Metal Lath System Makes ABSOLUTELY FIREPROOF PARTITIONS

Address
Dept. A for
Samples
and Catalogue

THE AMERICAN ROLLING MILL CO.
Middletown, Ohio

Full
Information
Gladly
Furnished



THE H. B. SMITH CO.
133-135 CENTRE ST. NEW YORK

MANUFACTURERS

Steam and Water Heating Apparatus

Factory: Westfield, Mass.

ESTABLISHED 1853. NEW YORK, PROVIDENCE,
Send for Catalogue. PHILADELPHIA.

E. G. SOLTSMANN
DRAWING MATERIALS
125 E. 42ND ST. NEW YORK

Write for Price List No. 12 of
DRAWING MATERIALS
and Samples of Papers



ELECTRIC LIGHT PRINTS

Prices for LARGE PRINTS
up to 4 1/2 x 12 ft.

BLACK PRINTS	Sq. Ft.	3c
on Paper	"	"
BLUE PRINTS	"	2c
on Paper	"	"
BLACK } on Cloth	"	5c
or Blue }	"	"

Write for Sample Prints

—Mention this Journal when ordering—

TEMPLE, TEX.—Architects Sanguinet, Staats & Hill have designed a \$100,000 hospital for the Santa Fe Railway to be located at Temple. The building to be three-story, of pressed brick.

TOLEDO, O.—Plans are being prepared by Bacon & Huber, 755 the Spitzer, for a new shop and general office building for the Lake Shore Electric Railway. Cost, \$200,000. The exact location has not been determined. The officials of the road are considering the towns of Fremont, Norwalk and Sandusky.

Architect George Mills, Gardner Building, is preparing plans for remodeling the clubhouse of the Toledo Traveling Men's Association, which George Ketcham, Valentine Building, has purchased for the purpose of converting into a theatre. The building is to be enlarged so as to be 70x120 feet, and will entail the expenditure of \$60,000.

The Toledo Yacht Club will rebuild its club-house, which was recently destroyed by fire. The new building will probably be of concrete and fireproof. No architect has been selected. Frank Frey is secretary and business manager for the club.

Architect George Mills is revising plans for the new commercial building, which the Bostwick-Braun Hardware Company, Monroe Street, Toledo, intend building on Summit Street at a cost of \$300,000.

Architect William B. Hunt, Spitzer Building, is making plans for an eight-story apartment-house for the Belvedere Building Company, Belvedere Apartments, Bancroft Street, Toledo, which is to be erected at a cost of \$70,000.

Architect William Hogle, Nasby Building, Toledo, O., is completing plans for an eight-story apartment-house, which is to be erected in the downtown district by a local syndicate, of which Architect Hogle is the representative. It will be 50x120 feet, and thoroughly modern. Contracts are to be

awarded as soon as plans can be completed.

TOPEKA, KAN.—Reports state that plans are being prepared for the erection of a new Episcopal Cathedral, to cost \$80,000. Bishop Millsbaugh is head of the church.

Dean Kaye, of Grace Cathedral, announces that an effort is to be made to secure the \$90,000 necessary to build a new church in Topeka, Kas. A gift of \$40,000 in property has been made toward the work.

TORONTO, CANADA.—The erection of new buildings for Knox College, at a cost, including site, of \$500,000, is reported under consideration.

TULSA, I. T.—The Central Building Company will erect a five-story building, to cost about \$125,000.

TURNER FALLS, MASS.—We are advised that Hilaire Brunelle is receiving bids for his tenement block to be constructed of concrete block and concrete foundations. Plans prepared by R. J. Godin, architect.

WASHINGTON, D. C.—A. B. Mullet & Sons, 1411 F Street, N. W., is said to be preparing plans for a four-story addition, which it is proposed erecting to the warehouse of the Terminal Storage Company.

Sunderland Brothers, architects, 1302 G Street, N. W., have been commissioned, as result of competition, to prepare plans and specifications for amusement hall for the Government Hospital for the Insane, Nichols Avenue, Anacostia, D. C.; one-story and basement: brick with stone trimmings; fireproof construction throughout; water and asbestos curtains; automatic sprinkler system. Cost, about \$75,000.

The erection of a school in Columbia Heights, at Fourteenth and Grundy Streets, to cost \$500,000, is reported under discussion.

WASHINGTON, PA.—Plans are being considered by the County Board of the Poor Directors for a county children's home, to cost \$50,000.

WATERBURY, CONN.—Plans have been prepared for a new station for the New York, New Haven & Hartford Railroad. Estimated cost, \$200,000. Chief Engineer is Edw. Gagel, New Haven, Conn. G. B. Mitchell, New Haven, is superintendent of building.

WATERTOWN, S. D.—It is stated that plans are being prepared for an Elks' Home, to be erected by the Watertown Lodge, No. 838, B. P. O. E. Cost, \$50,000.

WAUSAU, WIS.—It is stated that plans have been prepared for a Y. M. C. A. Building, which it is proposed erecting at an estimated cost of \$55,000.

WEST POINT, N. Y.—About \$1,200,000 will be expended on several new buildings, including dormitories for the students and a chapel at the military academy at West Point.

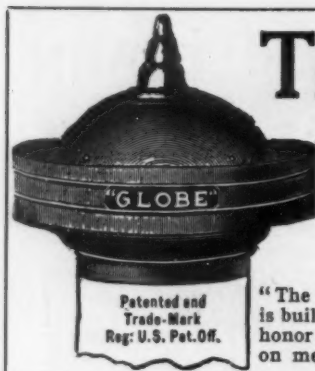
WHEELING, W. VA.—George S. Mooney, Brown Building, is said to be preparing plans for a seven-story fireproof business building which is to be erected for J. E. Kirby.

WICHITA, KAS.—The remaining portion of the funds for the new Baptist Church to be erected here will be raised soon. The structure will cost \$40,000.

WOODSTOCK, ONT.—Fielding Crossley, of the Bank of Commerce, is reported to be contemplating the erection of a \$60,000 hotel here.

WORCESTER, MASS.—Reports state that Watson & Huckel, 1211 Walnut Street, Philadelphia, Pa., have prepared plans for a union station to be used by the Boston & Maine, New York, New Haven & Hartford and the Boston & Albany Railroads. Estimated cost, \$400,000. Chief Engineer is H. Bissell, Boston, Mass.

YORK, PA.—Architects Stair & McClymont, it is said, have prepared plans for a five-story brick business and office building, 34x210 feet, for Lehmayr & Brothers. Cost, \$50,000.



The "GLOBE" Ventilator

IN BRASS, COPPER, GALVANIZED IRON
AND WITH GLASS TOPS FOR SKYLIGHT PURPOSES

SIMPLE SYMMETRICAL STORM-PROOF EFFECTIVE
FOR PERFECTLY VENTILATING BUILDINGS OF EVERY CHARACTER

Smoky Chimneys Cured  Globe Ventilated Ridging
MANUFACTURED BY SEND FOR MODEL AND PAMPHLET

GLOBE VENTILATOR COMPANY, TROY, N. Y.

AMERICAN

ALSEN CEMENT

Yearly Capacity, over 2,000,000 Barrels

45 BROADWAY, NEW YORK

GERMAN

"THE ABSOLUTELY SAFE"

Classified Index to Advertisements

(FOR ALPHABETICAL LIST SEE PAGE 2)

- | | | | |
|--|---|---|---|
| <p>AIR DIFFUSERS.
New York Blower Co., Chicago.....</p> <p>ARCHITECTURAL ORNAMENTS.
Emmel, Charles, Boston.....
Plastic Relief Mfg. Co., Chicago, Ill...</p> <p>ARTIFICIAL MARBLE.
Mycenian Marble Co., New York....</p> <p>ASPHALT.
Barber Asphalt Paving Co., Philadelphia, Pa.....
Neuchatel Asphalt Co., New York....</p> <p>ASPHALT ROOFING.
Barber Asphalt Paving Co., Philadelphia, Pa.....
Bird, F. W., & Son, East Walpole, Mass.</p> <p>BRONZEWORX (Ornamental).
Jackson, Wm. H., Co., New York.
Winslow Bros. Co., The, Chicago, Ill.</p> <p>CAPITALS AND COLUMNS.
Hartmann Bros. Mfg. Co., Mount Vernon, N. Y.</p> <p>CARPETS, RUGS.
W. & J. Sloane, New York.....</p> <p>CEMENT.
Alsen's Cement Works, New York..
Atlas Cement Co., New York.....
Universal Portland Cement Co., Chicago.....</p> <p>CHIMNEYS.
Weber Steel Concrete Chimney Co., Chicago, Ill.....</p> <p>COAL CHUTES.
Chappell Furnace Co., Morenci, Mich.</p> <p>COLUMNS (Lock Joint).
Hartmann Bros. Mfg. Co., Mount Vernon, N. Y.</p> <p>CONCRETE CONSTRUCTION.
Gilbreth, Frank B., New York.....
Underwriters' Engineering and Construction Co., New York.....</p> <p>CONCRETE PILING.
Alling Construction Co., Chicago.....
Corrugated Concrete Pile Co., New York.....
Engineering-Contracting Co., Baltimore.....
Miller, William L., Boston.....
Raymond Concrete Pile Co., Chicago, Ill.</p> <p>CONTRACTORS AND BUILDERS.
Frank B. Gilbreth, New York.....
Underwriters' Engineering and Construction Co., New York.....</p> <p>CORDAGE.
Samson Cordage Works, Boston.....</p> <p>CORRESPONDENCE SCHOOLS.
American School of Correspondence, Chicago.....</p> <p>DETAIL PAPER.
Mittineague Paper Co., Mittineague, Mass.</p> <p>DOORS (Fireproof Metal-covered).
Fire Proof Door Co., Minneapolis, Minn.</p> <p>DRAUGHTSMEN'S SUPPLIES.
Favor, Ruhl & Co., New York.....
Soltmann, E. G., New York.....</p> | <p>ELECTRIC PLATE WARMERS.
Prometheus Electric Co., New York.</p> <p>ELECTRIC SIGNALS.
Elevator Supply & Repair Co., New York.....</p> <p>ELEVATORS, ETC.
Otis Elevator Co., New York.....</p> <p>ENGINES (Hot Air).
Rider-Ericsson Engine Co., New York.....</p> <p>FILTERS.
Loomis-Manning Filter Co., Philadelphia, Pa.....</p> <p>FIREPROOFING.
Associated Expanded Metal Co., New York.....
Clinton Wire Cloth Co., Clinton, Mass.
Expanded Metal and Corrugated Bar Co., St. Louis.....
Gilbreth, Frank B., New York.....
Imperial Expanded Metal Co., Chicago.....
National Fireproofing Co., Pittsburgh, Pa.....
Trussed Concrete Steel Co., Detroit.....
Underwriters' Engineering and Construction Co., New York.....</p> <p>FIREPROOF LATHING.
Hayes, Geo., New York.....</p> <p>FLOOR POLISH.
Butcher Polish Co., Boston.....</p> <p>GLASS GLOBES.
Holophane Glass Co., New York.....</p> <p>GRATES, MANTELS, ETC.
Wm. H. Jackson Co., New York.....</p> <p>HARDWARE.
Stanley Works, New Britain, Conn.
Yale & Towne Mfg. Co., Stamford Conn.</p> <p>HEATING APPARATUS (Hot Water).
Gurney Heater Mfg. Co., Boston.....
H. B. Smith Co., New York.....</p> <p>HEATING APPARATUS (Steam).
Smith Co., H. B., New York.....</p> <p>INSULATED WIRE.
The Okonite Co. (Ltd.), N. Y.</p> <p>INTERLOCKING RUBBER TILING.
See Tiles (Interlocking Rubber)....</p> <p>IRONWORK (Ornamental).
Jackson, Wm. H., Co., New York.....
W. H. Mullins Co., Salem, Ohio.....
Winslow Bros. Co., The, Chicago, Ill.</p> <p>LAUNDRY MACHINERY.
Troy Laundry Machinery Co., Troy, N. Y.</p> <p>LIGHTNING RODS.
T. W. Jones, New York.....</p> <p>MAIL CHUTES.
Cutler Mfg. Co., Rochester, N. Y.</p> <p>MARBLE-WORKERS.
Batterson & Eisele, New York.....
The Robert C. Fisher Co., New York.</p> | <p>METAL CEILING.
The Berger Mfg. Co., Canton, Ohio..
W. H. Mullins Co., Salem, Ohio.....
See also Fireproofing.....</p> <p>METAL LATHING.
American Rolling Mill Co., Middletown, Ohio.....
G. Hayes, New York.....
Truss Metal Lath Co., New York.....</p> <p>MINERAL WOOL.
U. S. Mineral Wool Co., New York.....</p> <p>MORTAR COLORS.
Saml. H. French & Co., Philadelphia, Pa.....</p> <p>PAINT.
Joseph Dixon Crucible Co., Jersey City, N. J.....
National Lead Co., New York.....</p> <p>PHOTOGRAPHS.
J. W. Taylor, Chicago, Ill.....</p> <p>PLASTER ORNAMENTS.
Samuel H. French & Co., Philadelphia, Pa.....</p> <p>PLUMBING GOODS.
Standard Sanitary Mfg. Co., Pittsburgh, Pa.....
Wolff, L., Mfg. Co., Chicago.....</p> <p>PNEUMATIC TANKS.
Kewanee Water Supply Co., Kewanee, Ill.</p> <p>PRISM LIGHTING.
American Luxfer Prism Co., Chicago.
Holophane Glass Co., New York.....</p> <p>PUMPS.
Rider-Ericsson Engine Co., New York.</p> <p>REFLECTORS.
I. P. Frink, New York.....
Holophane Glass Co., New York.....</p> <p>REINFORCED CONCRETE.
Clinton Wire Cloth Co., Clinton, Mass.
Expanded Metal and Corrugated Bar Co., St. Louis.....
Gabriel Concrete Steel Co., Detroit, Mich.....
Gilbreth, Frank B., New York.....
Trussed Concrete Steel Co., Detroit.
Turner Construction Co., New York.
Underwriters' Engineering and Construction Co., New York.....
W. N. Wight & Co., New York.....</p> <p>ROOFING MATERIALS.
American Sheet & Tin Plate Co., Pittsburgh.....
Barber Asphalt Paving Co., Philadelphia, Pa.....
Bird, F. W. & Son, East Walpole, Mass.....
Keasbey & Mattison Co., Ambler, Pa.....
See also Asphalt Roofing.....</p> <p>SASH-CORD.
Samson Cordage Works, Boston.....</p> | <p>SCHOOLS OF ARCHITECTURE.
Lawrence Scientific School, Harvard University, Cambridge, Mass.....
Massachusetts Institute of Technology, Boston.....
Ohio State University, Columbus, Ohio.....
Society of Beaux-Arts Architects, The, New York.....
University of Michigan, Ann Arbor.....
University of Pennsylvania, Philadelphia, Pa.....
Washington University School of Engineering and Architecture, St. Louis, Mo.....</p> <p>SHEET-METAL WORK.
Berger Mfg. Co., Canton, O.....
W. H. Mullins Co., Salem, O.....
J. S. Thorn Co., Philadelphia, Pa.....</p> <p>SKYLIGHTS, ETC.
Burt Mfg. Co., Akron, Ohio.....
George Hayes, New York.....
W. H. Mullins Co., Salem, O.....
Vaile & Young, Baltimore, Md.</p> <p>STAIR TREAD.
American Mason Safety Tread Co., Boston.....</p> <p>TAPES AND RULES.
Lufkin Rule Co., Saginaw, Mich.....</p> <p>TERRA-COTTA.
The Northwestern Terra-Cotta Co., Chicago, Ill.</p> <p>TILES.
Information Bureau of Tile Industry Washington, D. C.....
Jackson, Wm. H., Co., New York.....</p> <p>TILES (Interlocking Rubber).
N. Y. Belting and Packing Co., Ltd., New York.....
Pennsylvania Rubber Co., Jeannette, Pa.</p> <p>TIN AND TERNE PLATES.
American Sheet & Tin Plate Co., Pittsburgh.....</p> <p>VACUUM CLEANING.
General Compressed Air & Vacuum Machinery Co., St. Louis, Mo.....</p> <p>VALVES AND PACKING.
Jenkins Bros., New York.....</p> <p>VENTILATING APPARATUS.
New York Blower Co., Chicago.....
Thomas & Smith, Chicago.....</p> <p>VENTILATORS.
Burt Mfg. Co., Akron, Ohio.....
Globe Ventilator Co., Troy, N. Y.</p> <p>WATERPROOFING.
Bird, F. W., & Son, East Walpole, Mass.</p> <p>WATER SUPPLY SYSTEMS.
Kewanee Water Supply Co., Kewanee, Ill.</p> <p>WEATHER VANES.
T. W. Jones, New York.....</p> <p>WINDOW LINE.
Samson Cordage Works, Boston.....</p> <p>WIRE GLASS WINDOWS.
George Hayes, New York, N. Y.....
James A. Miller & Bro., Chicago, Ill.</p> |
|--|---|---|---|