

Furnished by
Henry Pastor
Memorial Fund.

Public Library
RECEIVED
MAY 15 1907

Washington, D. C.

The AMERICAN ARCHITECT AND BUILDING NEWS

Regular Edition

Vol. XCI.

MAY 11, 1907.

No. 1637.

SUMMARY:

Pages 189-190

Using Twentieth-century Equipment in Thirteenth-century Time.
—Westminster Cathedral and the Cathedral of St. John the Divine—Transportation of Heavy Monoliths Difficult—Some Difficulties of those who Practise Ecclesiastical Art—The Proposed Pittsburgh Skyscraper and the Pneumonia Death-rate—The Pennsylvania Capitol Scandal—Suit for Breach of Implied Contract Compromised.

WESTMINSTER CATHEDRAL—I..... 191

ROMANCE AND ST. MARY-LE-BOW..... 195

PLATES: 196

Dormitory Building: Vassar College, Poughkeepsie, N. Y.: Five
Plates—Chattanooga Station, Chattanooga, Tenn.: Three Plates.

ADDITIONAL PLATES (International Edition):

House of T. M. Armstrong, Esq., Pittsburgh, Pa.—Carnegie Libraries at Hazelwood and Lawrenceville, Pa.—Carnegie Libraries at East Liberty and Oakmont, Pa.—Two Entrances.

NOTES AND CLIPPINGS..... 196

SOCIETIES, PERSONAL MENTION, ETC.

FLATIRON BUILDING

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.**OTIS ELEVATOR COMPANY**

New York Office: 17 Battery Place

"RENAISSANCE FIREPLACES."

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

In Envelopes, 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.**ELECTRIC SIGNALS**

FOR

PASSENGER ELEVATORS**ELEVATOR SUPPLY & REPAIR CO.**136 Liberty St.
NEW YORK34 W. Monroe St.
CHICAGO**THE CUTLER MAILING SYSTEM**PATENTED AND AUTHORIZED
SHOULD BE SPECIFIED BY NAME WHERE
A STANDARD AUTHORIZED MAIL CHUTE
EQUIPMENT IS DESIRED. INSTALLED IN
CONNECTION WITH THE U. S. FREE COL-
LECTION SERVICE ONLY BY THE SOLE
MAKERS

THE CUTLER MFG. CO., Rochester, N. Y.

**RENAISSANCE
DOORWAYS****RED CLOTH, GILT TOPS**

Plates (104), each 10 x 14 inches.

Price, \$7.50

THE AMERICAN ARCHITECT

12 WEST FORTIETH STREET

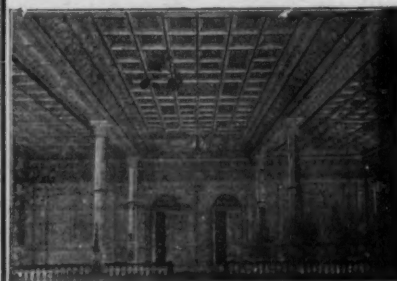
NEW YORK.

THE ROBERT C. FISHER COMPANY

Successors to Fisher & Bird

MARBLE & GRANITE WORKS139th-140th Sts.—Locust Ave. and Eas.
River. Established 1830. 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.

CANTON, OHIO.

ATLAS PORTLAND CEMENT

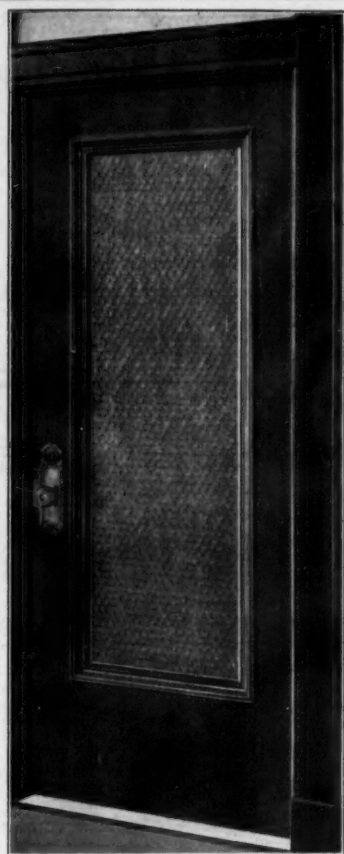
The Standard American Brand. Always Uniform

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

Alphabetical List of Advertisers

For CLASSIFIED LIST, See Page xviii.

A Alsen Cement.....xviii American Concrete Steel Co.....x American School of Correspondence, xiv American Luxfer Prism Co.....xi American Mason Safety Tread Co.....xix American Sheet & Tin Plate Co.....xxviii Associated Expanded Metal Co.....xix Atlas Portland Cement Co.....ii	Expanded Metal and Corrugated Bar Co.....vii F Fisher Co., Robert C.....ii French & Co., Samuel H.....viii Frink, I. P.....x G Genasco Roofing Co.....xxvii General Compressed Air and Vacuum Co. General Fireproofing Co.....viii, ix Globe Ventilator Co.....xxviii Gorham Mfg. Co.....xxvii Gurney Heater Mfg. Co.....xx	L Lane, John.....xv Loomis-Manning Filter Co.....ii Lufkin Rule Co.....xix M Mass. Institute of Technology.....iv Miller & Bro., James A.....viii Mittineague Paper Co.....xvi Monarch Water Heater Co.....xiii Mullins Co., The W. H.....viii N National Fireproofing Co.....v National Lead Co.....x Neuchatel Asphalt Co.....x New York Belting & Packing Co.....xxiii New York Blower Co.....x Northwestern Terra Cotta Co.....xxvii	Society of Beaux-Arts Architects.....iv Soltman, E. G.....xvii Standard Sanitary Mfg. Co.....vi Stanley Works.....viii Summer School of Painting.....x Sun Dial Co.....xiii T Taylor, J. W.....xix Thorn Co., J. S.....viii Thorp Fireproof Door Co.....iii Troy Laundry Machinery Co.....xx Trussed Concrete Steel Co.....xii, xiii
B Barber Asphalt Paving Co.....e-o-w, xiv Batterson & Eisele.....xxxii Berger Mfg. Co.....ii Bird & Sons, F. W.....xxxii Burt Mfg. Co.....xxx	H Hartmann Bros. Mfg. Co.....ii Harvard University.....iv Hayes, Geo.....viii Holophane Glass Co.....xix I Information Bureau of Tile Indus- try.....xi J Jackson Co., Wm. H.....xx Jenkins Bros.....xxii Jones, T. W.....xxii K Kewanee Water Supply Co.....xxv Keystone Varnish Co.....xxii Knoche & Steves.....viii	O Okonite Co. (Ltd.).....xxii Otis Elevator Co.....ii P Peerless Rubber Mfg. Co.....iii, iv, v, vi Pennsylvania Rubber Co.....ix R Raymond Concrete Pile Co.....xii Rider Ericsson Engine Co.....xvi S St. Louis Portland Cement Co.....xx Samson Cordage Works.....xxii Smith Co., H. B.....xxvii	U U. S. Mail Chute Equipment Co.....xxvi U. S. Mineral Wool Co.....viii Universal Portland Cement Co.....xx University of Illinois.....iv University of Michigan.....iv University of Pennsylvania.....iv V Vaile & Young.....xx W Washington University.....iv Weber Steel Chimney Co.....xli Winslow Bros. Co., The.....xxv Winslow Co., E. J.....li Wirt, F. B.....xix Wolff Mfg. Co.....xxxv
C Campbell, Walter M.....xix Cardnell, Vincent Co.....ix Cement Age Co.....lviii Chappell Furnace Co.....lxviii Chicago Portland Cement Co.....xx Clinton Wire Cloth Co.....xiv, xv, xxxi Contractors' Supply & Equipment Co., Corrugated Concrete Pile Co.....viii Cutler Mfg. Co.....ii	E Elevator Supply and Repair Co.....ii Emmel, Charles.....xxxii	Y Yale & Towne Mfg. Co.....xx	



RICHARDSON FIRE PROOF DOORS

MAKE EACH ROOM A SEPARATE BUILDING

It is just as easy and no more expensive to use Fire Proof Doors in place of wood doors—if you use Richardson Doors.

They are finished in Antique Copper and Brass Plate or the Natural Wood Grain, or White for hospitals.

The cost of Fire Proof Doors will be the same or less than wood doors—all points considered.

Suitable to all classes of fire proof structures.

The door is an integral part of the partition.

The door illustrated is one of the Richardson Standard Corridor Doors, dark mahogany finish, in the B. & O. Office Building, Baltimore; Parker & Thomas, Architects.

THORP FIRE PROOF DOOR CO.

Formerly Fire Proof Door Co.

1602 Central Ave.

MINNEAPOLIS, MINN.

SOCIETIES

ST. LOUIS ARCHITECTURAL CLUB.

The old McClure home, at Grand and Washington Avenues, one of St. Louis's historic buildings, will probably soon be occupied by the St. Louis Architectural Club and remodeled. The question of securing these new quarters was discussed at a meeting of the Club April 27, at which the officers for the ensuing year were installed.

The new officers of the Club, which has been an active supporter of the Civic Improvement League, are: *President*, A. D. Miller; *First Vice-president*, Eugene L. Plietsch; *Second Vice-president*, Frank Dellard; *Secretary*, Albert Pollard; *Treasurer*, Archie Garland.

The club has a membership of 190. At the next meeting an exhibition of the drawings of the Washington University students will be made and a membership in the Club conferred upon the student showing the best talent.

ARCHITECTURAL LEAGUE OF AMERICA.

It is possible that Washington may become the permanent headquarters of the Architectural League of America, which completed its ninth annual convention at the New Willard on April 24. The idea was suggested Monday at the opening session in an address by Commissioner Macfarland. Since then the delegates have been considering the matter, and the decision has been left with the executive committee. The delegates, almost as a whole,

are in favor of the selection of that city as the headquarters of the League.

Detroit was decided upon as the next meeting-place of the association. If Washington is selected as the headquarters of the League, the members will, in all probability, meet there every other year, the alternate years the meeting being held in different cities throughout the country.

In case of the establishment of the permanent headquarters of the association here, a secretary, whose home is in Washington, will be appointed.

J. P. Hayes, of Toronto, Canada, was elected as President for the ensuing year. Mr. Hayes, who has been chairman of the committee on current club work, is a member of the "Toronto Eighteen," one of the best known architectural societies of Canada. Mr. Hayes succeeds Ernest Russell, of St. Louis, as president of the League.

During the afternoon the delegates were taken about the city in a sight-seeing automobile, visiting the residential portion of Washington. Among other places visited was the Soldiers' Home and the Octagon House, where a reception was tendered them by the Washington Chapter of the A. I. A.

At the banquet at the New Willard Hotel, Washington as the architectural centre of the country was the theme of the addresses. Commissioner Henry L. West was the principal speaker of the evening. The other speakers were Dr. Thomas Nelson Page, Glenn Brown, Franklin Webster Smith, Percy Ash, E. W. Donn, J. C. Hornblower and W. D. Windom, of Wash-

ington; Ernest J. Russell, of St. Louis, and Max Dunning, of Chicago.

NEW YORK SOCIETY OF ARCHITECTS.

The New York Society of Architects celebrated the first anniversary of its organization by a dinner and business meeting, Wednesday evening, April 24. The Society, which includes in its membership architects in Brooklyn and Manhattan, passed resolutions strongly condemning the proposed amendments to the Tenement-house Law formulated by the Commission for passage through the Legislature. The feeling of members present was very strong that the proposed changes, instead of affording the relief which they had been led to hope for, constitute on the whole an additional burden and invasion of the rights of property owners, while containing inconsistencies and complications which render the law practically unworkable and abortive. Special attention was called to the numerous instances where discretionary power is given to the Department in enforcing the law, thereby opening the way to favoritism and other abuses. The absurdity also of limiting the greatest dimension of any room in an apartment-house, except when provided with a power passenger-elevator, to fifteen feet, and the prohibition of any alcove whatever, unless having a floor area of seventy square feet with a separate window, was also strongly commented upon.

The proceedings closed with election of officers for the ensuing year and auditing of the treasurer's account.

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.

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.

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.

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.

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.

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.

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.

"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

CALIFORNIA STATE BOARD OF ARCHITECTURE.

The northern and southern district branches of the State Board of Architecture met in annual session as a State Board in San Francisco, Tuesday, April 16. The Board held its biennial election of officers and re-elected the retiring members as follows: Northern district—H. A. Schulze, *President*; Lionel Deane, *Secretary* and *Treasurer*, and Seth Babson, William Curlett and Clinton Day as additional officers. Southern district—John P. Krempel, *President*; Frederick L. Roehrig, *Secretary* and *Treasurer*, with Octavius Morgan, Sumner P. Hunt and William S. Hebbard additional officers.

At the termination of business an informal meeting was held, at which a discussion on architecture, in general and the State law in particular, as applied to the profession, took place.

The members of the southern district who attended were Octavius Morgan, John P. Krempel, Sumner P. Hunt and Frederick L. Roehrig of Los Angeles, and W. S. Hebbard of San Diego. The northern district was represented by Henry A. Schulze, William Curlett, Lionel Deane, Clinton Day and Seth Babson.

The visitors were entertained by Clinton Day at luncheon at the Pacific Union Club, and were the guests of President Henry A. Schulze at dinner, those present being ex-Governor George C. Pardee, Octavius Morgan, Seth Babson, Frederick L. Roehrig, William Curlett, Sumner P. Hunt, Lionel Deane, William S. Hebbard, John P. Krempel, Clinton Day, Walter Mathews, Louis C. Mulgarte, John Galen Howard, Albert Pissis, Sylvian Schnaitacher, William Mooser, D. Franklin Oliver, L. E. Stanhope, Merritt J. Reid, T. J. Welsh, Bernard R. Maybeck, Albert Sutton, H. Garden Mitchell, James Reid, W. D. Bliss, Charles L. Havens, Henry Geilfuss, Edmund Kollfrath, William Knowles, Henry H. Meyers, Frederick D. Boese, Walter Brann, Herman Barth, B. P. Trobridge, L. M. Dutton, Arthur Brown, Jr., Nathaniel Blaisdell,

Chas. W. Dickey, Mathew O'Brien, E. C. Bolles, E. J. Vogel, George P. McDougall, Lewis P. Hobart and Joseph E. Haskins.

PERSONAL MENTION

JAMAICA, N. Y.—Judge McLaughlin, of the Third Municipal Court, on April 29 dismissed the action brought by Albert Bogart, architect, of Rockaway Beach, against William H. Devery, former Chief of Police of New York. Bogart sued to recover \$250, which he said was due him for drawing plans for a house for Devery at Breezy Point. At the hearing Devery alleged that he told Bogart he wanted plans for an \$8,000 house, but the architect prepared plans for a house that would have cost more than \$10,000, and he, therefore, refused to accept them. Devery said that he had paid the architect \$50, because Bogart said he needed the money.

OMAHA, NEB.—Mr. H. D. Frankfurt, architect, has opened an office at 51 Douglas Block.

CALIFORNIA.—Governor Gillett is looking around for a State architect, an office which was created by the Legislature last winter under the act providing for a Department of Engineering. The appointment rests solely with the Governor. The salary is \$4,000, but the architect does not have to give his entire time to the State.

PATERSON, N. J.—Mr. Abram Preiscal, an architect of this city, has opened offices in the Hobart Trust Company building, Passaic. He recently passed the State examinations for architects.

GRAND RAPIDS, MICH.—Articles of association have been filed with the County Clerk by Robinson & Campau, architects. The firm is organized for the purpose of conducting a general architectural and engineering business. The capital stock is placed at \$6,000. The company takes over the good will of the firm of W. G. & T. S.

Robinson. The following names appear in the articles: Fred S. Robinson, Julia E. Robinson and Antoine B. Campau.

LOUISVILLE, KY.—Mr. J. F. Sheblessy, architect, has formed a partnership with S. E. Des Jardins, of Cincinnati, one of the most prominent architects of the Queen City. The firm name will be Des Jardins & Sheblessy, and it will do business in both Louisville and Cincinnati. Mr. Sheblessy will have charge of the work here, while Mr. Des Jardins will remain in Cincinnati.

SOUTH NORWALK, CONN.—Mr. Warren R. Briggs, architect, of Bridgeport, has brought suit against the South Norwalk Union School district to recover \$700 damages. The suit is returnable to the Civil Court of Common Pleas. The plaintiff alleges that on or about May 1, 1906, the plaintiff and the defendants, through their authorized agents, entered into an oral contract for the plaintiff to draw plans and specifications for a school building and to superintend its construction for 5 per cent. of its cost and traveling expenses. The plaintiff alleges that he performed his part of the contract, that the building cost \$36,608, that there was due him \$1,870, that he spent \$40.60 for traveling expenses, and that he had received \$1,333.90, and that there is still due him \$536.10 and interest from January 1, 1905.

BIRMINGHAM, ALA.—Mr. William Leslie Welton, formerly with Messrs. McKim, Mead & White, of New York City, has formed a partnership with Mr. William T. Warren for the practice of architecture at Birmingham, Ala., Room 707, Title Guarantee Building.

Mr. Welton received his training in Boston and studied design under Professor Despradelles of the Massachusetts Institute of Technology.

He won the Rotch Traveling Scholarship of Boston and spent two years in foreign travel and study, and upon his return was engaged by Messrs. McKim, Mead & White. Mr. Welton is a member of the Boston

It is a common occurrence to have awarded to us contracts for fireproofing buildings originally designed for other systems. If all architects and engineers were as familiar with the adaptability of

TERRA COTTA HOLLOW TILE

as is our own engineering department, it is probable that these buildings would be **ORIGINALLY** designed for construction with our material, and under our methods.

Many designers of buildings being familiar with the use of Terra Cotta Hollow Tile under certain conditions only, are unaware of the possibilities of it for all kinds of construction, and therefore ignore the opportunity for its use in the particular buildings they may have in hand.

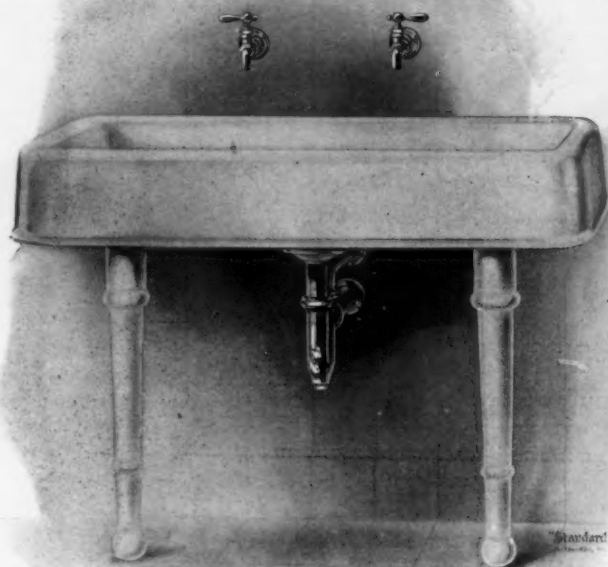
When the information regarding our materials is placed before them as applied to their specific case, they are usually surprised to find that we can give a better fireproof construction than they had planned, at a cost as low, or lower, than they had figured for other systems.

It is upon this basis that we solicit the opportunity to confer with the engineer or architect of a building **BEFORE** the final plans for fireproofing are made. Let us know what kind of a fireproof building **YOU** are contemplating, and you will find our vast fund of information, our experience and our organization, of incalculable help, not only in the designing of your building, but in the securing of the best type of fireproof construction at a reasonable cost.

National Fire Proofing Company

MANUFACTURERS OF TERRA COTTA HOLLOW TILE
CONTRACTORS FOR FIREPROOF CONSTRUCTION

NEW YORK Flatiron Building	PITTSBURG Fulton Building
CHICAGO Hartford Building	PHILADELPHIA Land Title Building
MINNEAPOLIS Lumber Exchange	BOSTON Old South Building
WASHINGTON Colorado Building	ST. LOUIS Victoria Building
CINCINNATI Union Trust Building	LOS ANGELES Union Trust Building
	LONDON, ENGLAND 27 Chancery Lane



"Standard" Porcelain Enameled Sink, with Apron all around, Enameled Sink Legs with Wall Supports, Nickel-plated Strainer, Fuller adjustable Flange Bibbs and "p" Trap with Waste and Vent to Wall with or without Bibbs and Trap.

Houseowners

Know what

"Standard"

Stands for

In the public mind "Standard" and Sanitation are synonymous terms. Whenever you specify "Standard" Porcelain Enameled Fixtures for Residence, Hotel or Apartment House you are assuring the owner that he will receive what he recognizes as the best in the way of sanitary equipment.

Standard Sanitary Mfg. Co.

PITTSBURGH, PA., U. S. A.

Architectural Club and the Architectural League of New York and is the winner of many prizes, including medals of the Architectural League and of the Chicago Architectural Club. Mr. Warren is a native of Alabama and received his training at the Columbia University School of Architecture and in the office of Messrs. McKim, Mead & White.

They have been awarded the South Side Baptist Church and Sunday-school at Birmingham, Ala., which was won in competition, and also the Boys' Industrial School at East Lake. They have also several residences partly completed.

CINCINNATI, O.—Mr. S. E. Desjardins, formerly senior member of the firm of Desjardins & Hayward, architects, Cincinnati, and Mr. J. F. Sheblessy, architect, Louisville, Ky., have formed a partnership under the firm name of Desjardins & Sheblessy, with offices in Cincinnati and in Louisville.

COMPETITIONS

BELOIT, WIS.—It is reported that competitive plans will be received about June 1 for a high school, to cost about \$100,000. Wm. B. Ittner, St. Louis, Mo., consulting architect.

BERKELEY, CAL.—It is reported that the town trustees will receive competitive plans for city hall until May 13. The cost to be about \$100,000.

DECATUR, ILL.—Plans will be received until June 8 by the Grand Lodge, Knights

of Pythias (E. R. Wright, Secretary, Taylorville) for an administration building, to be erected in Decatur; cost not to exceed \$125,000.

PITTSBURGH, PA.—It is reported that competitive plans are to be submitted to the Central Board of Education on May 27 for the Central High School.

BUILDING NEWS.

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

ABERDEEN, S. D.—The Methodist society has adopted plans by Brown & Davis, architects, Cincinnati, for a church, 90x100, mission style, to cost \$50,000. Contracts will be let about July 1.

ATLANTA, GA.—Plans are being considered by the Methodists for a hospital at Ivy Street and Auburn Avenue. Cost, \$250,000.

BALTIMORE, MD.—Joseph Evans Sperry, Calvert Building, has prepared plans for a warehouse on the corner of Wicomico, Scott and Stockholm Streets, for the Baltimore Bargain House. Estimated cost, \$600,000.

BATTLE CREEK, MICH.—Bids will be asked for at once by the Board of Education for construction of a high school to be erected here, to cost about \$150,000. Mills & Pruitt, Columbus, O., are architects.

BAYONNE, N. J.—St. Henry's R. C. Church, Avenue D, Rev. Father Peter E. Reilly, pastor, is collecting funds for a new church. Father Reilly will also build a rectory and Sisters' Home.

BELLEVERNON, PA.—The First M. E. congregation will erect new church, to cost \$25,000. J. D. Hazleton, pastor. M. C. Kettle, Bellevernon, is chairman of Building Committee. Brick and stone trimmings, two stories, 50x130. Architect has not yet been selected.

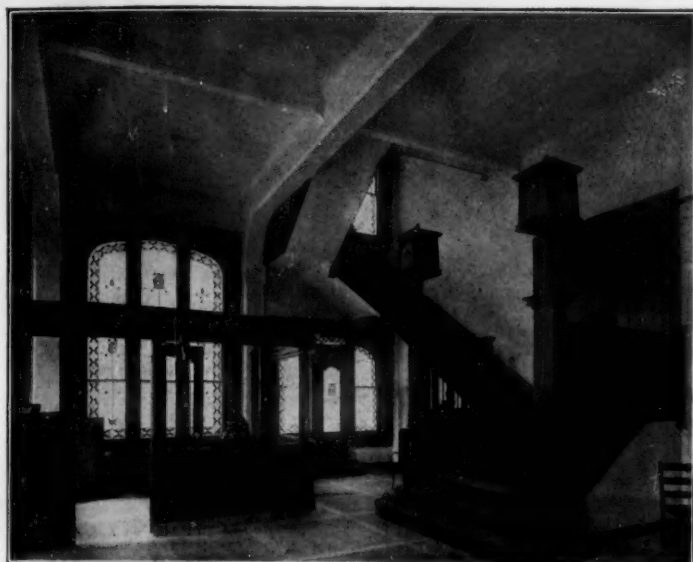
BELOIT, WIS.—Five leading architects will be invited to submit plans for the high school building.

BIRMINGHAM, ALA.—The Farmers' Union of Alabama, it is reported, will erect a warehouse here, to cost about \$100,000.

BRISTOL, VA.—TENN.—Interstate Hotel Company, Dr. Geo. E. Wiley, president, will erect fireproof theatre in connection with proposed \$100,000 hotel; seating capacity, 2,000. Plans have been prepared by Barber & Klutz, Knoxville, Tenn.

BROOKLYN, N. Y.—Sealed proposals will be received by J. Knox Taylor, Washington, D. C., May 28, for the construction (complete) of the extension to the U. S. Post-office, in accordance with drawings and specifications, copies of which may be had at this office or at the office of the Custodian at Brooklyn, N. Y.

BRYN MAWR, PA.—It is reported that the Lower Merion School Board has purchased a site in Bryn Mawr upon which



REINFORCED CONCRETE STAIRWAY

Wagoner Undertaking Co., St. Louis, Mo.

The Wagoner Building is constructed entirely of reinforced concrete footings, columns, girders, floors and stairs. The main girders span the entire width of the building, 40 feet, and give a pleasing and substantial effect to the structure.

Corrugated Bars

Lend themselves to the construction of attractive buildings with ornamental and architectural features as well as to the construction of plain and substantial warehouses and factories.

U

Write for our 1907 Catalog; it contains many illustrations of well designed reinforced concrete buildings.

Expanded Metal & Corrugated Bar Co.

Frisko Building, ST. LOUIS

they propose to build a new township high school, at a cost of between \$100,000 and \$150,000.

BUTTE, MONT.—Dick P. Sutton and others will erect a theatre building on plans by Architect Houghton, to cost \$60,000.

CASEY, ILL.—The construction of a high school is in contemplation here, to cost about \$50,000.

CHARLESTOWN, W. VA.—Farmers' and Merchants' Deposit Company has had plans prepared by A. B. Mullett & Co., Washington, D. C., for erection of bank building; 40x46 feet; brick with mansard roof; granite and brownstone trimmings; exposed walls on two fronts of fancy brick laid with steel-tooled joint in white mortar; steps and sill of main entrance of light-gray granite; lower portions of side walls of vestibule finished in Vermont marble with moulded plinth blocks; gas and electric lights; steam heat; concrete sidewalk.

CHATTANOOGA, TENN.—Architect R. Hunt is preparing plans for the Broughton Institutional church at Atlanta, Ga., to cost \$300,000.

It is stated that preliminary plans have been prepared for a four-story Y. M. C. A. building, which it is proposed erecting on Georgia Avenue and East Eighth Street, to cost about \$150,000.

CHICAGO, ILL.—The estate of Otto Young is considering the erection of a \$10,000,000 hotel on Michigan Boulevard, and an option of the property upon which the hotel is to be built has been granted. The plans

provide for a group of restaurants, cafes, lounging rooms, lobbies and parlors on the ground floor, together with an inclosed carriage-way and an enormous corridor, 25 feet wide and 25 feet high, extending the entire length of the building. There is provision for a large vestibule, which will open into the office. Other things planned are a handsome Pompeian room, 42x57 feet; a palm-room, 41x68 feet; a billiard-room, also on the ground floor, 45x58 feet, and a main dining-room, 123 feet long. On the second floor the plans provide for a ball-room, 95x100 feet, to open into a conservatory 100 feet long. D. H. Burnham & Co., Railway Exchange Building, are architects. John E. Knobel, Heyworth Building, is a representative of the Young estate.

Officials of the Corn Exchange National Bank have announced that work will be begun within a short time on their new bank building at the corner of La Salle and Adams Streets. The structure is to be sixteen stories in height. The exterior will be of granite up to the third floor, and above that brick and terra-cotta. The bank quarters are to have finishings of foreign marbles and bronze and specially constructed furniture. The building will front 75 feet on Adams Street and 188 feet on La Salle, and will cost about \$1,000,000. It will be approximately 245 feet in height. Shepley, Rutan & Coolidge, Borland Block, are architects. It is expected that the structure will be finished by May 1, 1908.

Julius Liebling, editor of the *Jewish Daily Press*, it is stated, has secured a site at Halsted and Bunker Streets, and intends

erecting an eight-story store and office-building.

The People's Gas Light and Coke Company is said to be planning the erection of a building at Adams Street and Michigan Avenue, costing approximately \$1,000,000.

Marshall & Fox, First National Bank Building, will be the local architects for a large and costly vaudeville theatre and hotel which the United States Amusement Company, a new corporation, contemplates erecting in the loop district. A. L. Erlanger, of Klaw & Erlanger, theatre proprietors, New York City, is president and managing director of the company. A feature of the theatre will be a foyer, 50x100 feet, with wide lanes and promenades. It is stated that the deal for the site has been consummated, that the theatre will cost \$1,000,000, and that the building and site will represent an investment of \$5,000,000. The theatre may be built first and the hotel later on. The details of the building are yet to be decided upon.

The Calumet Club, northeast corner of Michigan Avenue and Twentieth Street, has secured an option on 53 feet of frontage adjoining its present building and contemplates the erection of an extension to same. Ferd W. Peck, Monadnock Block, is president of the club. The addition will be of fireproof construction, with front of stone for the first story and pressed brick above, to correspond with the present building, have hardwood finish, steam heat, electric light, and all modern improvements.

SPRING PAINTING '07 Edition

A seasonable circular on the vital subject of paint. Different forms of metal and wood construction are attractively illustrated, and there's just enough "talk." Write for free copy 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., 140 Cedar St. NEW YORK

Corrugated Concrete Pile Co. of America

1170 Broadway, New York

LICENSEES

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



Knoche & Steves

Manufacturers of

Plastic Relief Ornaments

For Interior and Exterior Decorations

Write for Catalogue A.

2101-2103 Reading Road Cincinnati, O.



CHICOPEE, MASS.—It is stated that plans are being prepared for a brick and cement edifice, 160x75 feet, which it is proposed erecting on Front Street, at a cost of about \$70,000, for members of St. Stanislaus Church.

CINCINNATI, O.—It is stated that the Guaranty Realty Company (Wm. Walker Smith, attorney) contemplates the erection of a \$200,000 apartment-house.

CLARKSBURG, W. VA.—It is said that plans are being prepared by Architects Mills & Pruitt, 233-237 North High Street, Columbus, O., for the new Goff M. E. church. Cost, \$50,000.

CLEVELAND, O.—Plans have been completed for a building to be constructed for the First National Bank, on Euclid Avenue. The building will be of monumental nature, and one of the finest structures in Cleveland. The building will have four immense pillars in the façade. The columns are 62 feet high, and over 6 feet in diameter, making them among the largest in existence. Crowning the columns will be a strong entablature, with a parapet and balustrade above. The space between the col-

umns is treated in the same manner, in keeping with the classical motive, bronze being used in connection with the frames

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

ESTABLISHED 1844

PEERLESS Mortar Colors

BLACK · RED · BROWN · BUFF

NEW COLORS: Moss Green, Royal Purple, French Gray, Pompeian Buff, Colonial Drab

They are the original colors manufactured, and are the brightest and most durable

Samuel H. French & Co.
PHILADELPHIA

J. S. THORN CO.

Architectural Sheet Metal Works

Manufacturers and Erectors of Ventilating Skylights, Fire proof Window Frames and Sash, and Opening Fixtures to operate Ventilating Sashes

Nos. 1223-33 Callowhill Street
PHILADELPHIA, PA.

Proved
Best
by
Every
Test

Mullins Fireproof Window

is absolutely fireproof and actually does what no other window can do—it stands every test.

Ask for an Estimate
or write for our convincing catalogue.

The W. H. Mullins Co. 208 Franklin St. Salem, O.

We also make everything in architectural sheet metal work—statuary, skylights, wrought iron grilles, cornices, etc. 130-page catalogue of stock designs on request.

for window and door openings. The material used in the façade will be a light-colored granite. J. Milton Dyer, Cuyahoga Building, is architect. Estimated cost, \$250,000. Plans will be completed about June 1.

CLINTON, IA.—It is stated that improvements are to be made to the Agatha Hospital, at a cost of \$50,000, which include the erection of a \$15,000 building as a nurses' home, to be called the Grace Pool Home.

John Morrell & Son., Clinton, Ia., are preparing drawings for a Scottish Rite Cathedral, to be built at a cost of \$100,000.

P E N N S Y L V A N I A

I
N
T
E
R
L
O
C
K
I
N
GI
N
T
E
R
L
O
C
K
I
N
G

TO SPECIFY PENNSYLVANIA INTERLOCKING RUBBER TILING

is to assure the highest result it is possible to achieve in a floor. The beauty of coloring, elegance of finish, and the marvelous adaptability of the interlocking shapes to an endless variety of individual designs, are combined with every practical advantage of all other materials and many superior qualities which are exclusive.

Every architect and builder should have our Book of Designs in Color, which is also descriptive, and a supply of design blanks to carry out their own ideas if desired. These will be mailed on request.

PENNSYLVANIA RUBBER COMPANY JEANNETTE, PA.

NEW YORK—1741 Broadway.
CHICAGO—1241 Michigan Avenue.
PHILADELPHIA—615 N. Broad Street.
ATLANTA, GA.—102 N. Prior Street.
SAN FRANCISCO, CAL.—512-14 Mission Street.

BOSTON—20 Park Square.
BUFFALO—717 Main Street.
DETROIT—237 Jefferson Avenue.
CLEVELAND—2134-6 East Ninth Street.
LONDON—26 City Road.

R U B B E R T I L I N G

COLUMBIA, Mo.—Louis C. Stephens, of St. Louis, it is stated, has been engaged to prepare plans for the conservatory of music and gymnasium to be erected at Stephens College. It is also reported that about 20 new dormitories are to be added to the college.

Architect L. C. Spiering, of St. Louis, has prepared plans and specifications for curators of Stephens College for a new conservatory of music containing 40 music rooms, a gymnasium and 20 dormitories. Estimated cost, \$50,000.

COLUMBUS, NEB.—It is said that a committee has been appointed, of which Henry Hockenberger is chairman, to select a site and engage an architect to prepare plans for the Y. M. C. A. building which is to be erected, at a probable cost of \$30,000.

CONCORDIA, KAN.—Robert Misell and Dr. Charles Caton will begin at once erecting a fine office-building, 80x32 feet, two stories and basement. The building will be of brick, with stone trimmings.

DAYTON, O.—Plans are being prepared by Architect Albert Pretzinger, Reinhold Building, for a residence for E. D. Grimes, Callahan Power Block. Cost, \$30,000.

The Y. M. C. A. is planning to erect a \$300,000 building.

DENVER, COL.—Plans are being prepared by the members of the Second Church of Christ (Scientists) for an edifice to the church. Cost, \$100,000.

DES MOINES, IA.—Henry Williams, Fifth and Des Moines Streets, is said to be plan-

ning the erection of an apartment-house in East Des Moines, to cost \$120,000.

DETROIT, MICH.—Wm. S. Joy & Co. are stated to be the architects for an apartment-house which is to be erected by Dr. Wm. Dunlap, at a cost of \$100,000.

The erection of a new library, to cost \$750,000, including site, is reported under consideration.

The members of the Fellowcraft Club (Chas. W. Kotcher, president), according to reports, are preparing to erect a \$100,000 club-house.

Architects John Scott & Co., 518 Moffat Building, are preparing plans and will take figures latter part of May for a church house for the First Presbyterian society, Rev. E. H. Pence, pastor, 156 Fort Street, west, to be of pressed brick and Bedford stone, slate roof, steam heating, electric lighting, open plumbing, marble, Mosaic tile, plate and art glass, brick mantels, hardwood finish, hard plaster, etc. Cost, \$50,000.

DULUTH, MINN.—The County Board has appropriated \$700,000 for the erection of the proposed new Court-house.

Chas. A. Marshall announces the erection of a vaudeville theatre in Duluth, to cost \$100,000 to \$150,000.

EAST ORANGE, N. J.—Geo. E. Tuby & Co., of New York City, are stated to have been authorized to prepare complete plans and specifications for the Fourth Ward school.

ELDORADO, KAN.—It is said that a new Court-house, to cost \$100,000, will be erected in Butler County, Kansas.

FORT DODGE, IA.—The erection of a city hospital, at a cost of \$50,000, is reported contemplated. The Commercial Club has agreed to donate \$25,000 toward the project.

FORT MEADE, S. D.—It is stated that improvements will be made at this fort this summer, to include the following: Cavalry drill hall, \$70,000; band barracks, \$20,000; two double sets of captains' quarters, \$50,000.

FORT ST. PHILIP, LA.—Bids are asked by Capt. B. T. Clayton, Quartermaster, U. S. A., New Orleans, La., until noon, May 23, for constructing post exchange and bowling alley at Fort St. Philip.

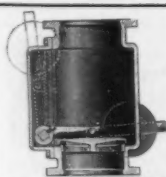
GETTYSBURG, PA.—It is reported that bids are being received for a three-story brick bank and office-building which is to be erected for the First National Bank, at a cost of \$60,000. Herman Miller, Crozer Building, Philadelphia, is the architect.

GRIFFIN, GA.—The Council has decided to issue bonds amounting to \$65,000 for the new City Hall.

GUTHRIE, IND.—Plans have been accepted by the Commissioners of Lincoln County for a Court-house, to cost \$100,000. Plans were prepared by P. H. Weathers, Kansas City, Mo.

HACKENSACK, N. J.—Consistory of Second Reformed Church will build a new edifice, to replace one destroyed by fire. William H. Zabriskie is treasurer of the congregation.

HARRISBURG, PA.—The State Armory Board has asked the State for an appro-



Excelsior Straightway Back-Pressure Valve

Has a full, unobstructed passage through it nearly in line with the pipe, and therefore offers no resistance to the free flow of steam. Thoroughly reliable when used as a back pressure valve, it is also adapted for use as a relief or free exhaust valve for condensers. By changing position of outside lever, it will work equally well in a vertical or horizontal position.

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

CLUSTER REFLECTORS

In great variety of sizes and shapes for lighting stores, store windows, schools, offices, hospitals, banks, libraries, etc. Made well. Reflect well. Last well.

L. 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
95 BROADWAY NEW YORK



"What brand of White Lead shall I specify in my painting contracts to be assured of purity of material and excellence of manufacture?"

The brands made by the National Lead Co. are of uniform superiority in every respect. No matter where you find them, if the Dutch Boy Painter is on the side of the keg, full confidence may be placed in the White Lead and in the results.

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.)



Nothing has given the burglary business a greater set-back than the disposition of most builders to use

YALE LOCKS

throughout their work.

Write for booklet concerning "the Yale Lock and some imitations," watch-pocket edition. It's the key to a good lock.

The Yale & Towne Mfg. Co.
No. 9 Murray Street, New York

priation of \$900,000 for National Guard armories during the next two years.

Robt. H. Catts is said to be contemplating the erection of a ten-story hotel here.

The site of the burned Grand Opera House, at Third and Walnut Streets, has been sold to a syndicate of Philadelphia capitalists, headed by Robert M. Catts. The plan of the new owners is for a hotel of ten or more stories, to be similar to the Majestic in Philadelphia. The cost of the new hotel is estimated at \$750,000.

HARTFORD, CONN.—B. W. Morris, New York City, will have plans ready about the middle of June for an art building, to be erected here.

HAVRE DE GRACE, MD.—St. Patrick's Catholic Church is having plans prepared by Thomas C. Kennedy, 113 North Charles Street, Baltimore, Md., for erection of stone edifice on site 45x100 feet; parsonage will be built in connection.

HOMESTEAD, PA.—Architect J. C. Fulton, Uniontown, Pa., has drawn plans for stone church, to be erected by the First Baptist congregation at Ninth and McClure Avenues. Cost, \$50,000. v.

Owing to difficulty in securing a site, the erection of Masonic Hall has been deferred for a few months longer. It is proposed to erect a building to cost \$60,000. Preliminary plans have been drawn. v.

HOT SPRINGS, ARK.—The members of the Roman Catholic Church, it is reported, are arranging to erect a \$50,000 edifice.

The American Architect and Building News.

Vol. XCI.

SATURDAY, MAY 11, 1907.

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	189-190
Using Twentieth-century Equipment in Thirteenth-century Time—Westminster Cathedral and the Cathedral of St. John the Divine—Transportation of Heavy Monoliths Difficult—Some Difficulties of those who Practise Ecclesiastical Art—The Proposed Pittsburgh Skyscraper and the Pneumonia Death-rate—The Pennsylvania Capitol Scandal—Suit for Breach of Implied Contract Compromised.	
WESTMINSTER CATHEDRAL.—I.	191
ROMANCE AND ST. MARY-LE-BOW	195
ILLUSTRATIONS:	
Dormitory Building, Vassar College, Poughkeepsie, N. Y.: Five Plates—Chattanooga Station, Chattanooga, Tenn.: Three Plates.	
Additional: House of T. M. Armstrong, Esq., Pittsburgh, Pa.—Carnegie Libraries at Hazelwood and Lawrenceville, Pa.—Carnegie Libraries at East Liberty and Oakmont, Pa.—Two Entrances.	
NOTES AND CLIPPINGS	196
SOCIETIES, PERSONAL MENTION, ETC.	

FEW things are more interesting than the explanations that are given by those upon whom rests the responsibility of conducting to a safe conclusion the building of the Cathedral of St. John the Divine in justification and support of their expressed sense of satisfaction with the rate of progress and the achieved results. When Dr. Huntington, rector of Grace Church, at the annual meeting of the Church Auxiliary of the Cathedral, declares that the undertaking to build the Cathedral was "either an act of supreme folly or else of sublime faith," one does not feel like putting into words some other possible definition of the act, but when he declares that people "ought to be satisfied with what has been done in twenty years," because it took some six hundred years to perfect Cologne Cathedral, we feel bound to say that as an apologist and champion he is as mixed in his ideas as he is astray in his logic. Of the depth and reality of the religious and ecclesiastical need of a cathedral upon Bloomingdale Heights we cannot pretend to judge, but if there is such need we are convinced that it should be satisfied with a speed and perfection becoming to the twentieth century and not barely comparable to those which did so much honor to the thirteenth and fourteenth. Supposing that the thirteenth-century builders had had at command the building processes and equipment of to-day, and were within hand's grasp of the treasure-chests of the richest city in the world, it cannot

be doubted but that they, with their conviction and glowing enthusiasm, would already have finished this building, great, elaborate and costly as it unquestionably is to be. Suppose, again, that the building were intended to bear upon its front the inscription, "The Carnegie Cathedral of St. John the Divine," can anyone believe that the building would be only one-sixth built at the end of nearly a score of years?

WE have felt at times that cathedral-building in these days was a little of an anachronism, and we have no hesitancy in declaring that it is unqualifiedly anachronistic to employ the pace only of the thirteenth century while neglecting the spirit. If those responsible for this undertaking are to be justified by their works, they must rouse themselves and discover that, while they were fancying they were shaven monks and their workmen sandalled serfs and vassals, unaided by steam or electricity, the great Westminster Cathedral in London had been builded and put to its intended uses. Although the New York cathedral is in a sense a private affair, it seems to us that, as all building-operations are to the public in the nature of an eyesore, the community has enough at stake in the matter to justify it in making strong recommendations that an effective change in the administrative end of the undertaking should be brought about. The fact that, while there are in this diocese some seventy-five thousand communicants, there have been thus far collected for the Cathedral in all these years a little short of thirty-one hundred thousand dollars, seems to prove that the recommendation suggested might be both judicious and timely.

IT is permissible to hold varying views as to the real architectural value of monolithic columns of unusual size, and many architects may not share our feeling that in most cases they are not worth half their cost. It will be remembered that, after much money and time had been spent in trying to get out monolithic granite shafts for the columns in the choir of the Cathedral of St. John the Divine, the architects had finally to accept shafts cut in two pieces, as block after block broke in the lathe while being turned to shape. Even then, in their smaller and more manageable form, the streets over which the heavy stones were dragged suffered considerable damage. But architects who believe in the value of these expensive and eccentric features should always keep in mind the possibility that their cherished desire may be thwarted and the costly monstrosity left on their hands simply because it is undeliverable by rail, and water-carriage is out of the question. A case in point is that of the red granite monolithic obelisk which, it is hoped, may finally be set up as a memorial at the entrance to the Sault Ste. Marie Canal in Michigan, but which at present lingers at the quarry in Branford, Conn., because the railroad-men have not yet discovered a route that affords curves of the proper radius and bridges and culverts of unquestionable stamina. And yet the stone is but forty-five feet long and weighs hardly more than sixty tons,

IT will be remembered that, a year ago, a curious and interesting discussion arose as to the sex of angels, growing out of the fact that Mr. Gutzon Borglum, in modelling certain angels for the Cathedral of St. John the Divine had given to each and every the graces of the female figure. The result of much learned discussion on the part of those instructed in theological, if not in artistic, lore, seems to be that, if angels have sex, the authorities indicate that such sex is in most cases, if not in all, masculine. As a consequence of this discovery, Mr. Borglum remodelled some of his figures, not waiting to submit the matter to legal determination. Similar action, however, has not been taken by Mr. Bernard Ellison, a painter, in a very similar case which turns on the question whether the canons of ecclesiastical art are fixed or variable, and if, being fixed, an artist ignorant of their existence can vary from them and yet collect his fee. It seems that Mr. Ellison was employed to do certain mural paintings in the Roman Catholic Church of St. Rosalie, in Brooklyn, in which the figures of the Saints were to be introduced, but when the work was unveiled the priest and congregation were amazed to find that the Saints had been painted as bearded instead of as smooth-shaven men. On the ground that only the Prophets and Fathers of the Church wore beards, Mr. Ellison was refused payment for his work, as he obviously had not satisfied his contract, which was to paint Saints. As the artist now sues to recover for his work only one hundred dollars, the reader can draw his own inference as to the magnitude and intrinsic value of his work, but the incident shows clearly that ecclesiastical art is not a thing to be undertaken by those ignorant of its iconography.

IT seems that the suggested seven-hundred-foot skyscraper to which we alluded recently is not to obliterate altogether Richardson's Court-house at Pittsburgh, since the tower, built on a base ninety feet square, is to rise, if built, from the court-yard of the present building. Should this structure actually be erected—and before work is begun on it owners of land in its neighborhood would do well to consider the very illuminating diagrams¹ prepared by Mr. William Atkinson while investigating the evil consequences of a somewhat similar building suggested for Boston—it would give an excellent chance for determining how tenable is our theory that skyscrapers are responsible largely for the alarming increase of the death-rate from pneumonia. The doctors just now are pointing out that there is now only a point's difference in the rate between consumption and pneumonia, and that the phenomenal increase in the latter case is synchronous with the advent of the extra-high buildings in our cities. We some time ago suggested that the skyscraper might be responsible for certain forms of lung disease, for though the healthy man can easily endure the slight difference in atmospheric pressure between the street and the top floor, the man with weak lungs or the aged may find this sudden change of pressure, slight as it is, the last straw that overloads his powers of resistance. A sudden lift of six-hundred feet in an atmosphere so heavy as is Pittsburgh's at the street level would

surely show a measurable difference in pressure and indicate results that would be perceptible by the skilled observer.

IT will be remembered that ex-Governor Pennypacker and his fellow-members of the Capitol Building Commission have, ever since the unsavory scandal over the Pennsylvania Capitol began to unfold itself, rather plumed themselves on the fact that their part of the work was well and honestly done, and that the Capitol fabric had been well built and finished at an outlay of something like six hundred thousand dollars less than the appropriation, four millions. But, alas! even this consolation seems likely to be denied them, and Payne, the contractor under them for building the Capitol, seems now likely to be found as deep in the mud as Sanderson, the "furnishing" contractor for the other Board, is deep in the mire. At recent sessions of the Investigating Committee, sub-contractor after sub-contractor testified, when confronted with public vouchers in the shape of receipted bills drawn upon their several billheads, that they had not rendered the accounts exhibited to them, but had actually presented much smaller bills. In each such case the sub-contractors remembered that Payne, on one plea or another, had obtained from them copies in blank of their standard billheads! Just what became of the differential is not stated, but the inference seems to be that the man who prepared these padded invoices kept it all.

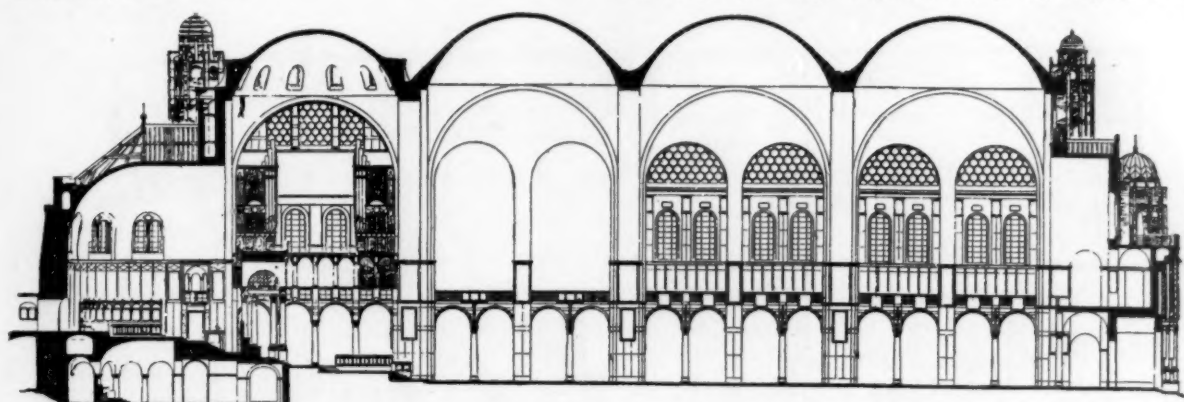
ONE does not, for some reason, have very much respect for compromises, whether they affect verdicts or merely the settlement of a disputed account, and yet a large part of the progress all about us is the result of just such compromises. Just what value in a legal sense a compromise has, we are not learned enough to know, though we do understand that a matter "settled out of court" has not the standing as precedent that it would have had if finally reached as the result of court proceedings. Still there are compromises and compromises, and we apprehend that when a public body or municipality—which has abundant means and limitless time for litigation—has settled a suit out of court by compromising with the claimant, a precedent has been established of far more value than if the dispute had been between two private individuals. Therefore, we feel that Messrs. Rankin, Crane & Kellogg have done almost as good a turn to the profession in accepting from the City of Newark a payment out of court of some \$2,000 as if they had collected in court their full claim, the \$7,895.85 for which they sued for the breach of an implied contract between the Board of Education of that city and the several competitors who, relying on the advertised invitation, expended their time and skill in the preparation of designs for a Manual Training School. The lesson is a very wholesome one, for it is difficult to see how the city can avoid making similar compensation to the other disappointed competitors—provided that, like the Philadelphia architects, they have kept their office-accounts with the same business-like particularity and can produce the evidence needed to substantiate their itemized claims.

¹See "American Architect" for March 3, 1906.

WESTMINSTER CATHEDRAL.¹—I.

TWENTY-EIGHT years ago, in a house once occupied by Edmund Burke, who wrote an essay on "The Sublime and the Beautiful," a number of assistants were engaged in working out the designs of a well-known architect. These designs were for important buildings, in all styles, ranging from the Romanesque to the Renaissance, and they showed a power and a knowledge of detail unsurpassed, we believe, at that time. Before entering on his duties the assistant was told that he would not be expected to design, but merely to exercise care and judgment, and to take an interest in his work. From the time when he entered this realm of art in the morning until his departure in the evening he was virtually a prisoner, and the annual holiday was a reprehensible undertaking, rather than a recognized institution. Smoking, whistling and gossiping were strictly prohibited, and to take off one's coat for greater freedom or coolness was preeminently disrespectful, not to say vulgar.

But undue restraint—if such it was—engenders reaction, so whenever a suitable opportunity occurred—it may seem strange to you—conventionality was cast aside for uncontrollable outbursts of boyhood; the "Sublime and the Beautiful" were then forgotten, and not a thought was given to the occupant of the room below ours, until we received this charming admonition from our respected master:



Choir, St. Peter's Crypt. Baldachino and High Altar. Sanctuary. Transept. Nave. Narthex.
WESTMINSTER CATHEDRAL: LONGITUDINAL SECTION.

13 John Street, Adelphi, W. C.

April 3, 1879.

Gentlemen:—

Mr. G. writes, complaining of the unnecessary disturbance you indulge in, and requests me to ask you to refrain from making more noise than is essential to the performance of your duties. I feel sure, after this, neither of you will give cause for further complaint, inasmuch as it is unbecoming to engage in acts that affect the dignity of an office and the peace of a neighbor.

Yours faithfully,

JOHN F. BENTLEY.

And now, gentlemen, in the face of this somewhat humiliating confession, you will understand that we scarcely dared to presume to accept the invitation of your Council to read a paper on the Westminster Cathedral, and in view of what has already been written on this great work of Mr. Bentley's by men of "light and leading," we have also to confess to a feeling of surprise that the subject should be considered to possess some latent interest that has not yet been revealed.

Perhaps it was thought we might be able to explain the apparent incongruity or contradiction in this last phase of Mr. Bentley's artistic development, how—like Athene from the brain of Zeus—this strange design, of noble proportions, could be produced in so sudden and complete a manner by one of the latest exponents of the Gothic revival. Or was it expected that some light could be thrown on Mr. Bentley's intentions respecting the completion of a building that may be said to rank with those of national importance?

As the effacement of man's work—by the hand of time—increases our curiosity to look into the past, so does the unfinished production impel us, with equal and perhaps pardonable curiosity, to look into the future; not merely to speculate as to what might have been had the master lived, to finish his work, but to wonder what may happen in the absence of his guiding influence.

¹A paper by Mr. J. A. Marshall, read before the Architectural Association, April 12, 1907.

You remember that touching incident related by Vasari, how the pupils of the immortal Raphael placed at the head of the bed on which their dead master lay his unfinished picture of the Transfiguration, while they stood around like helpless orphans. You will, I am sure, agree that that picture should have been allowed to remain just as it left the master's hand, without the profaning touch of any pupil.

The simile need not detain us, yet we cannot forget that an unfinished building, in occupation, is not quite the same thing as an unfinished picture or piece of sculpture; existing contracts have to be carried out, and the varied requirements of the occupants have in some way to be met, yet we all fully realize that the peculiar impress of the work carried out under the personal supervision of the original architect can never be revived, nor can it, in this instance, be emulated.

Reverting for a moment to the supposed inconsistency of style, it is not necessary to remind the members of this association that the training of an architect is now very different from what it was ages ago, when the builders of each country worked in only one traditional style that could easily be adapted to the simple requirements of the community. Then, the young architect—we are told—learnt the principles of his art, profession, or craft, on the building, in the workshop, and at the guild. His whole environment was redolent of lime, timber, stone; he was not afraid of soiling his gloves, nor of crushing his silk hat

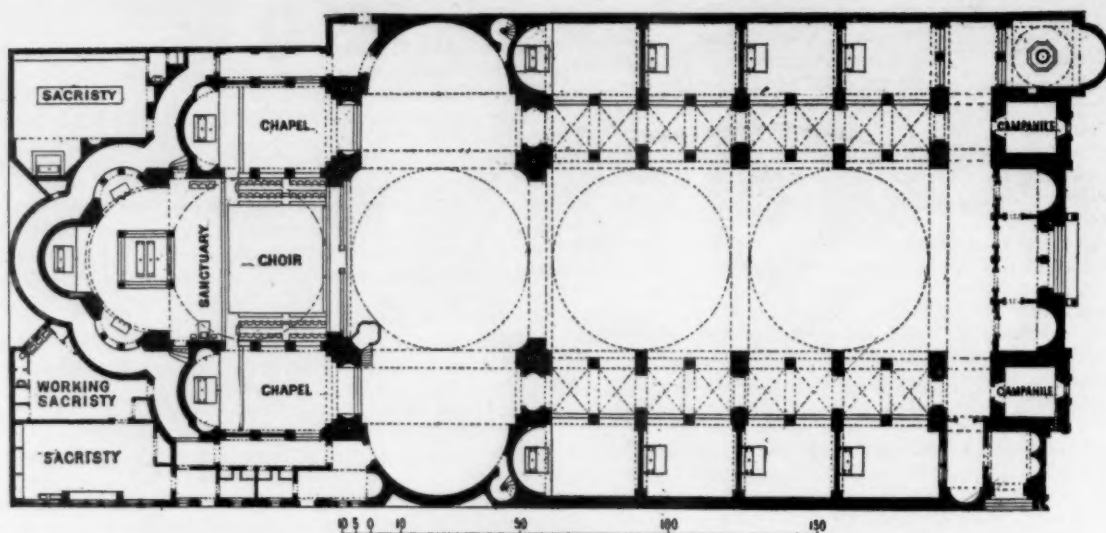
against the scaffolding; paper and rubber were not part of his outfit, and drawing, as we understand it, not one of his qualifications.

If one of these obscure cathedral builders could enter this room to-night we would ask him to tell us more about this, and in return initiate him into the mysteries of modern practice; he would then realize that the times had, indeed, changed; that vast storehouses of knowledge were open to us that were quite unknown to him; that the demands on the skill of our architects are so bewilderingly varied and complex as to prevent the universal application of any particular style, old or new; and that the life-work of a modern architect has not infrequently presented an epitome of the styles of all ages.

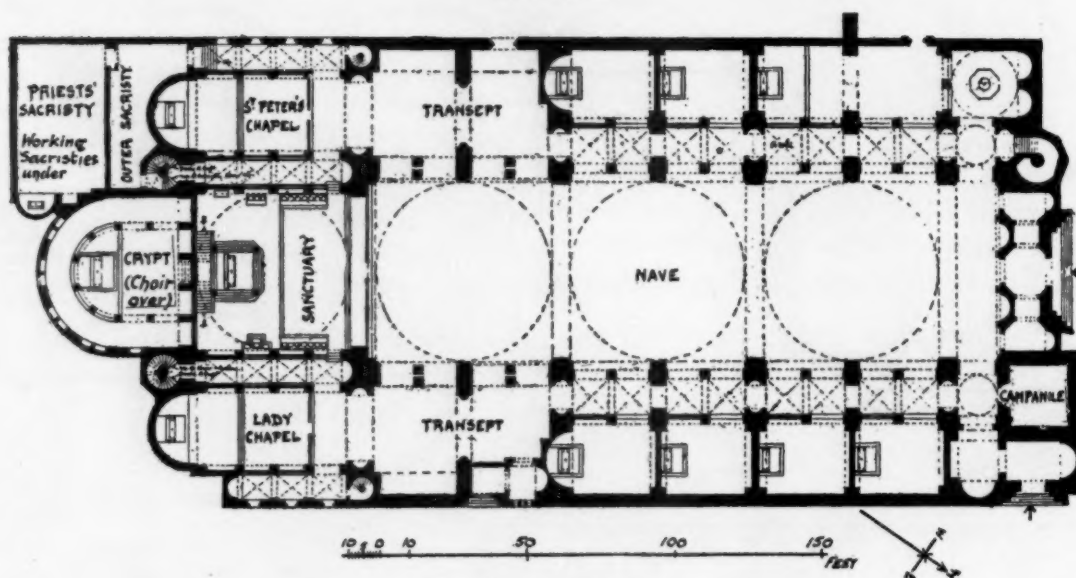
He would learn that we spend most of our time in "the office," and some of it on the building. And, lastly, the perspicuity of our building-regulations and the simplicity of our sanitary requirements would equally astonish him, were it at all possible for us to explain them.

If our visitor happened to be an English, or, say, French architect of the mediæval period he would, of course, not quite understand the style of the Westminster Cathedral. He might possibly detect in the plan the Christian symbol of the Cross, and he would recognize as old friends the gaunt Norman-looking transepts and the well-buttressed choir; the sheer unbroken height of the campanile might win his admiration, but the inconsistent treatment of the roofing and the peculiarities of the west front would certainly puzzle him and provoke the question as to whether these were the outcome of necessity or of design.

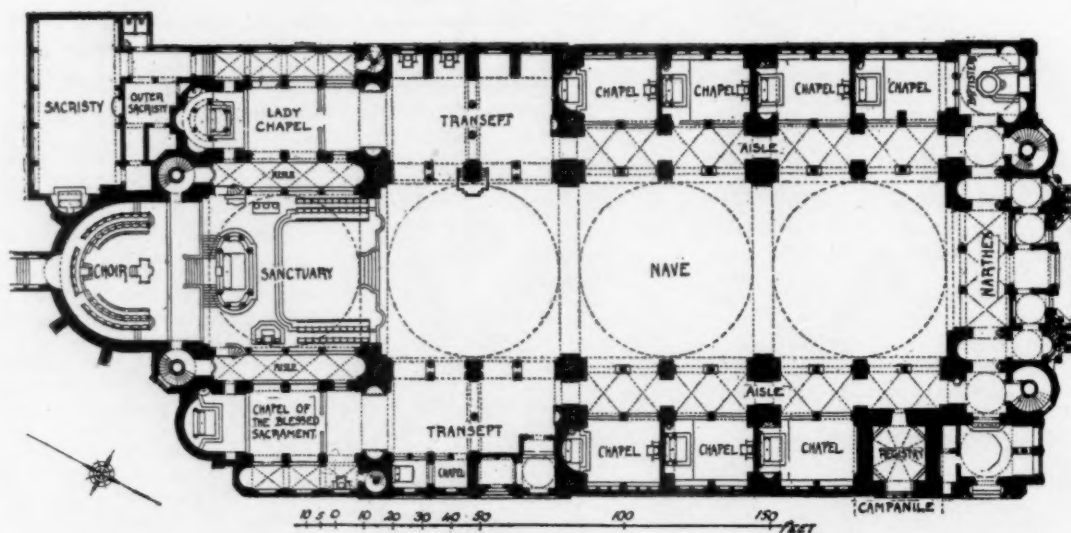
If the exterior betrayed to his mind some slight acquaintance with the work of his own period, the interior would bear no such trace; for a moment the unconcealed austerity of its structure might remind him of some early abbey or conventual church, but he would soon find that the resemblance was more visionary than real, and that, after all, it was not a Gothic building that had served as the prototype.



The First Plan.

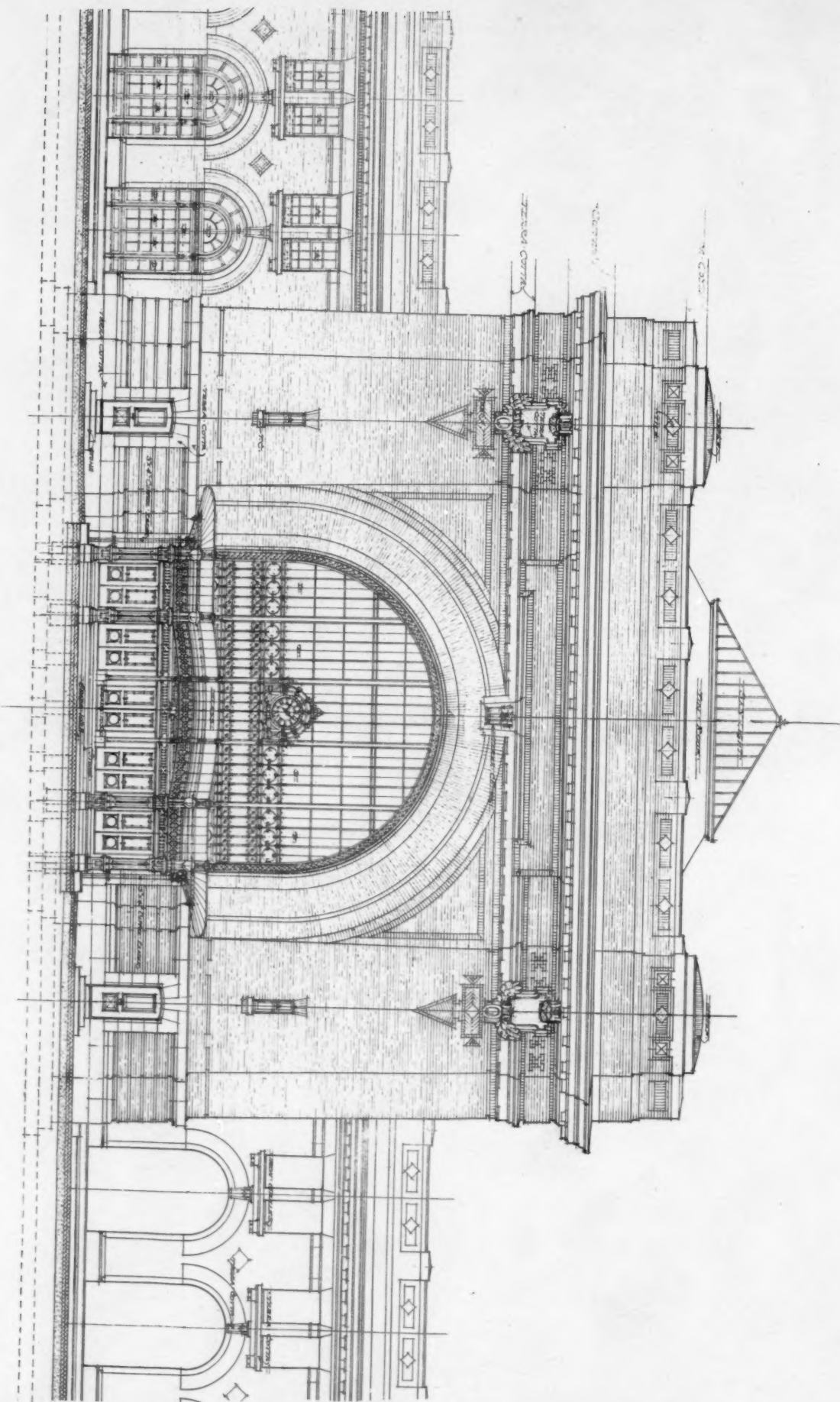


The Intermediate Plan.



The Final Plan.

THE DEVELOPMENT OF THE PLAN OF WESTMINSTER CATHEDRAL. JOHN F. BENTLEY, ARCHITECT.



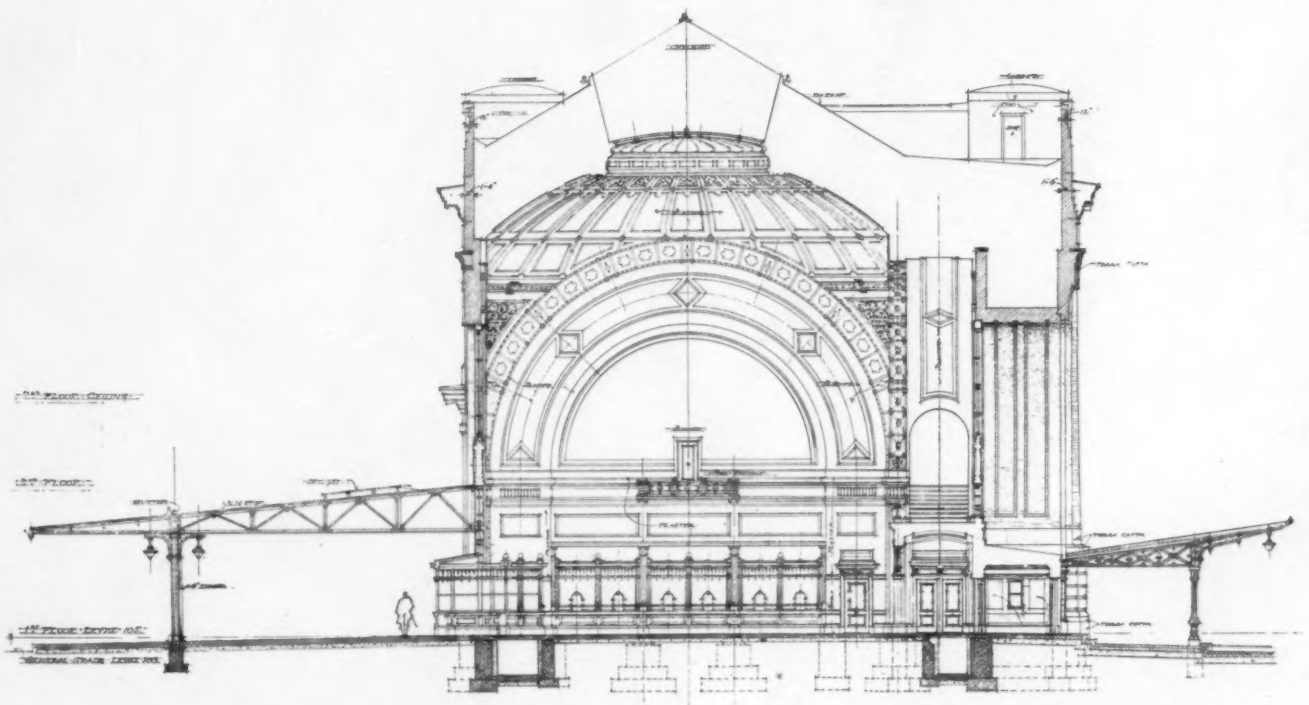
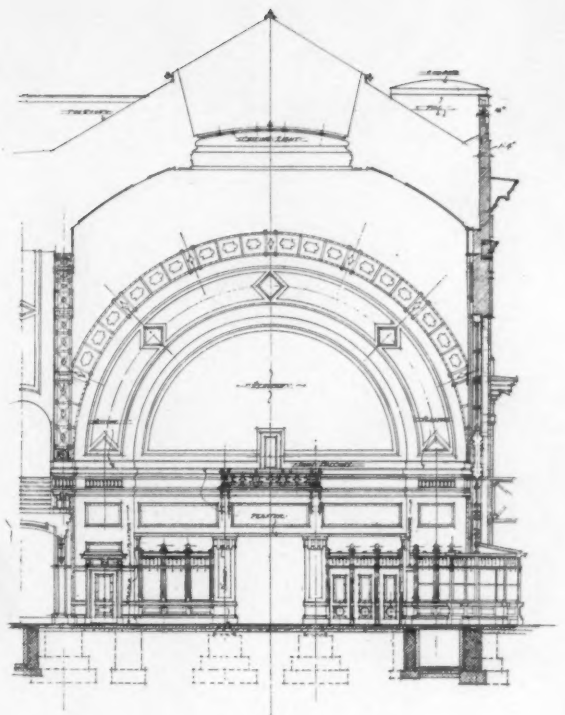
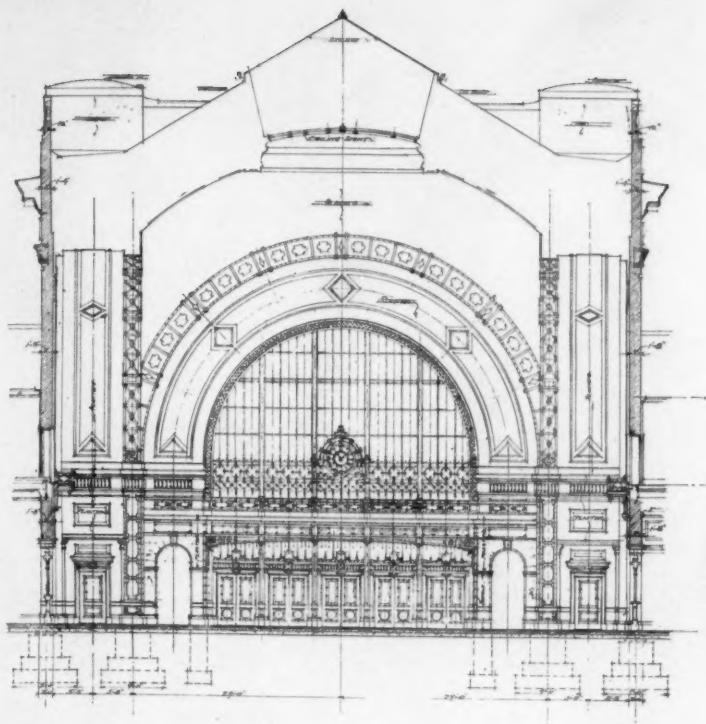
CENTRAL PAVILION: CHATTANOOGA STATION, CHATTANOOGA, TENN.

Donn Barber, Architect.

The American Architect and Building News.
Regular Edition.

Copyright, 1907, by The American Architect.

Volume XCI., Number 1637.
May 11, 1907.



SECTIONS: CHATTANOOGA STATION, CHATTANOOGA, TENN.

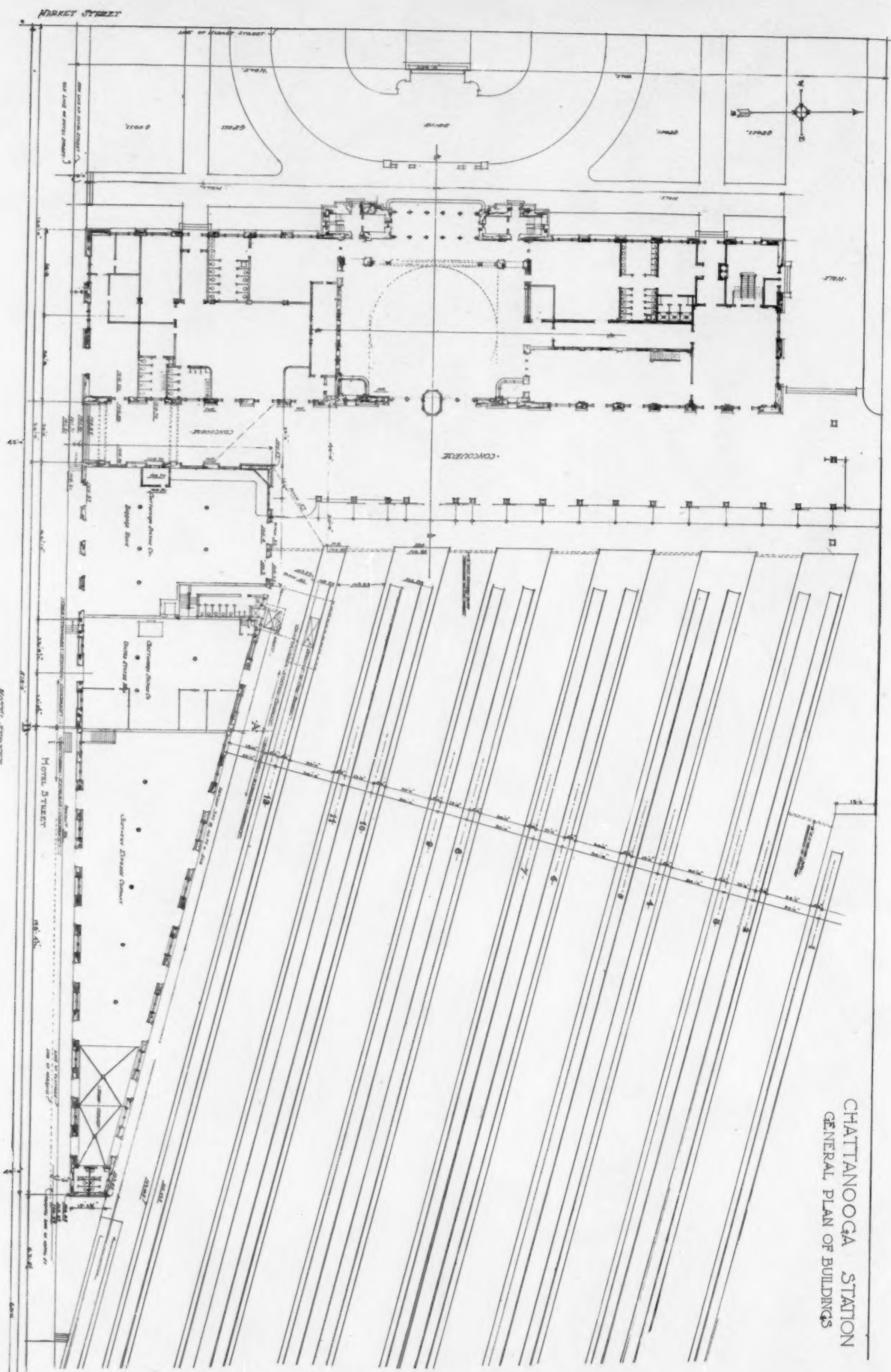
Donn Barber, Architect.

The American Architect and Building News.
Regular Edition.

Volume XCI. Number 1637.
May 11, 1907.

Copyright, 1907, by The American Architect.

CHATTANOOGA STATION
GENERAL PLAN OF BUILDINGS



PLAN: CHATTANOOGA STATION, CHATTANOOGA, TENN.

Donn Barber, Architect.

The American Architect and Building News.
Regular Edition.

Copyright, 1907, by The American Architect.

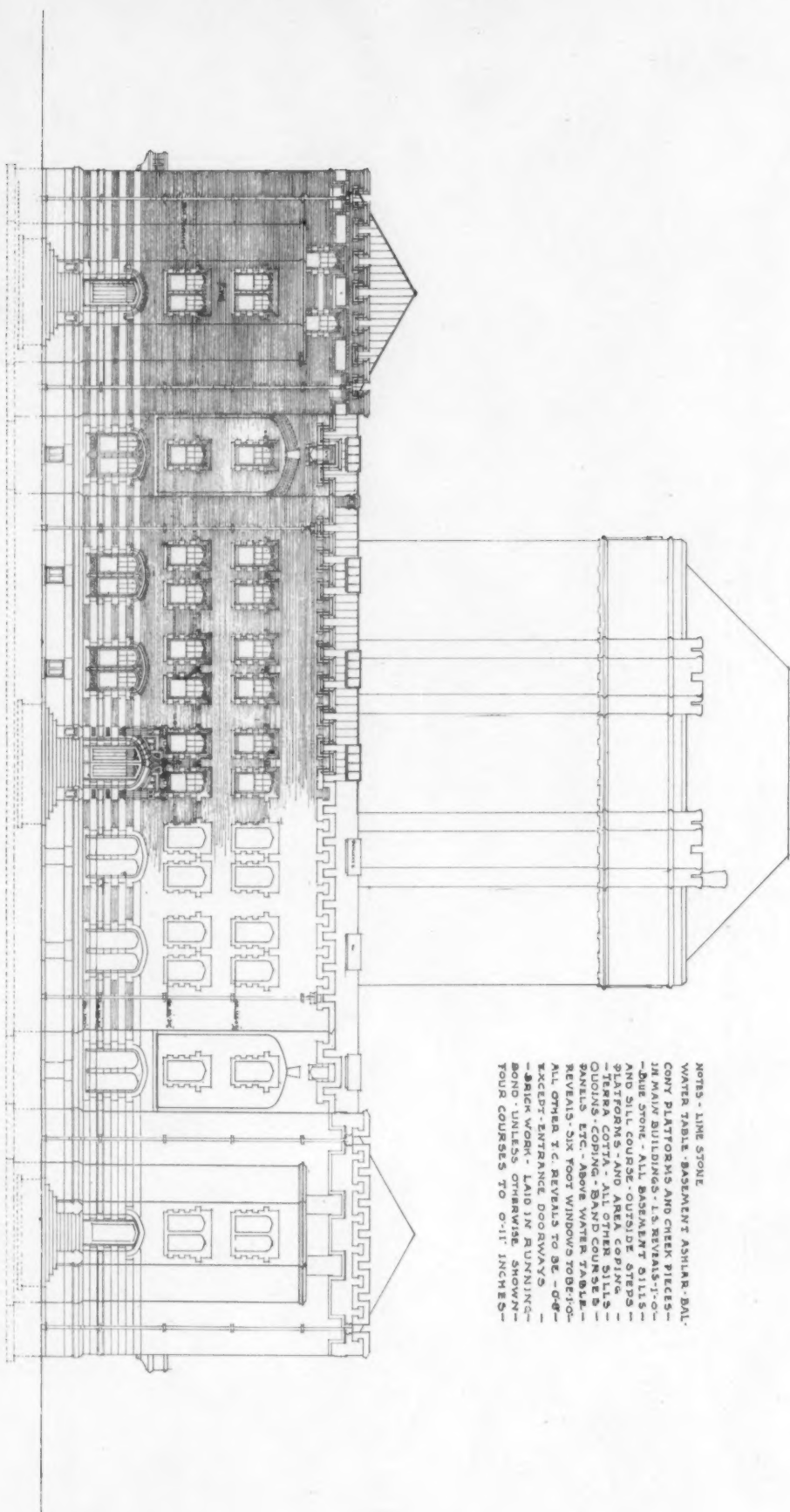
Volume XCI, Number 1637.
May 11, 1907.

Volume XCI., Number 1637.
May 11, 1907.

Copyright, 1907, by The American Architect.

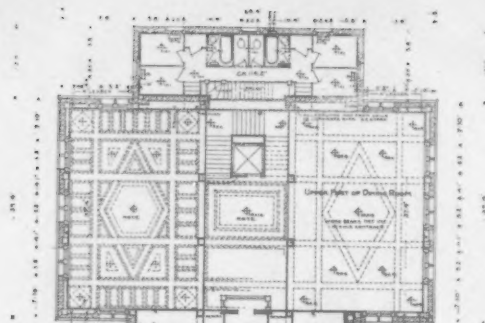
Pilcher & Tachau, Architects.

FRONT ELEVATION: DORMITORY BUILDING, VASSAR COLLEGE, POUGHKEEPSIE, N. Y.



NOTES - LIME STONE
WATER TABLE - BASEMENT ASHLAR - BAL
CONY PLATFORMS AND CHIEF PIERCE -
IN MAIN BUILDING - L3 REVEALS 1'-0-"
- DUE SOUTH - ALL BASEMENT SILLS -
AND SILL COURSE - OUTSIDE STEPS -
PLATFORMS - AND AREA COPING -
TERRA COTTA - ALL OTHER SILLS -
QUONDS - COPING - BAY COURSE -
QUONDS ETC. ABOVE WATER TABLE -
REVEALS SIX FOOT WINDOWS TO 0'-0-"
- ALL OTHER 1'-2" REVEALS TO BE 0'-0-"
- EXCEPT ENTRANCE DOORWAYS -
- BRICK WORK - LAID IN RUNNING -
- BOND - UNLESS OTHERWISE SHOWN -
- FOUR COURSES TO 0-11 INCHES -

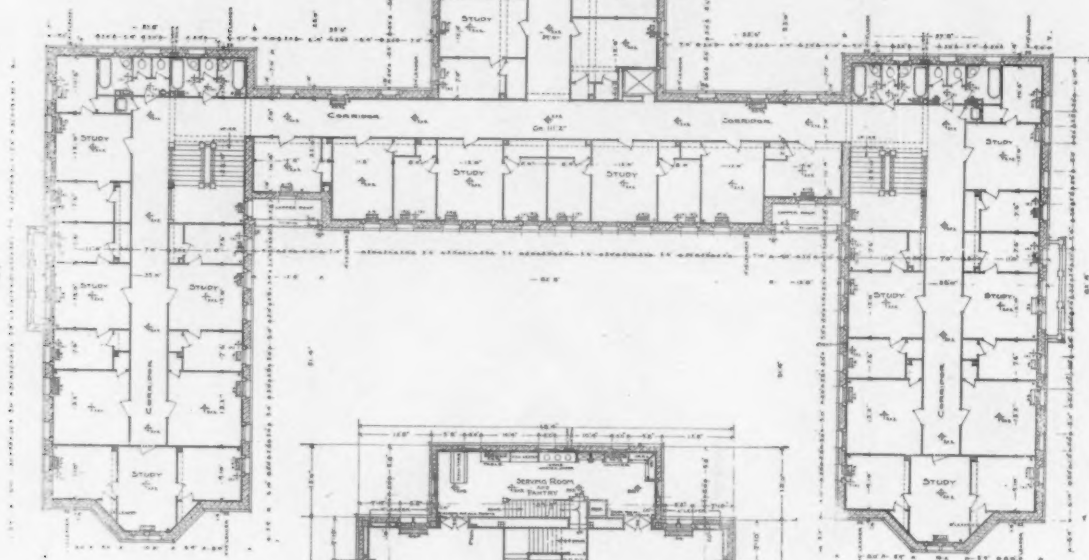
SECOND STORY PLAN



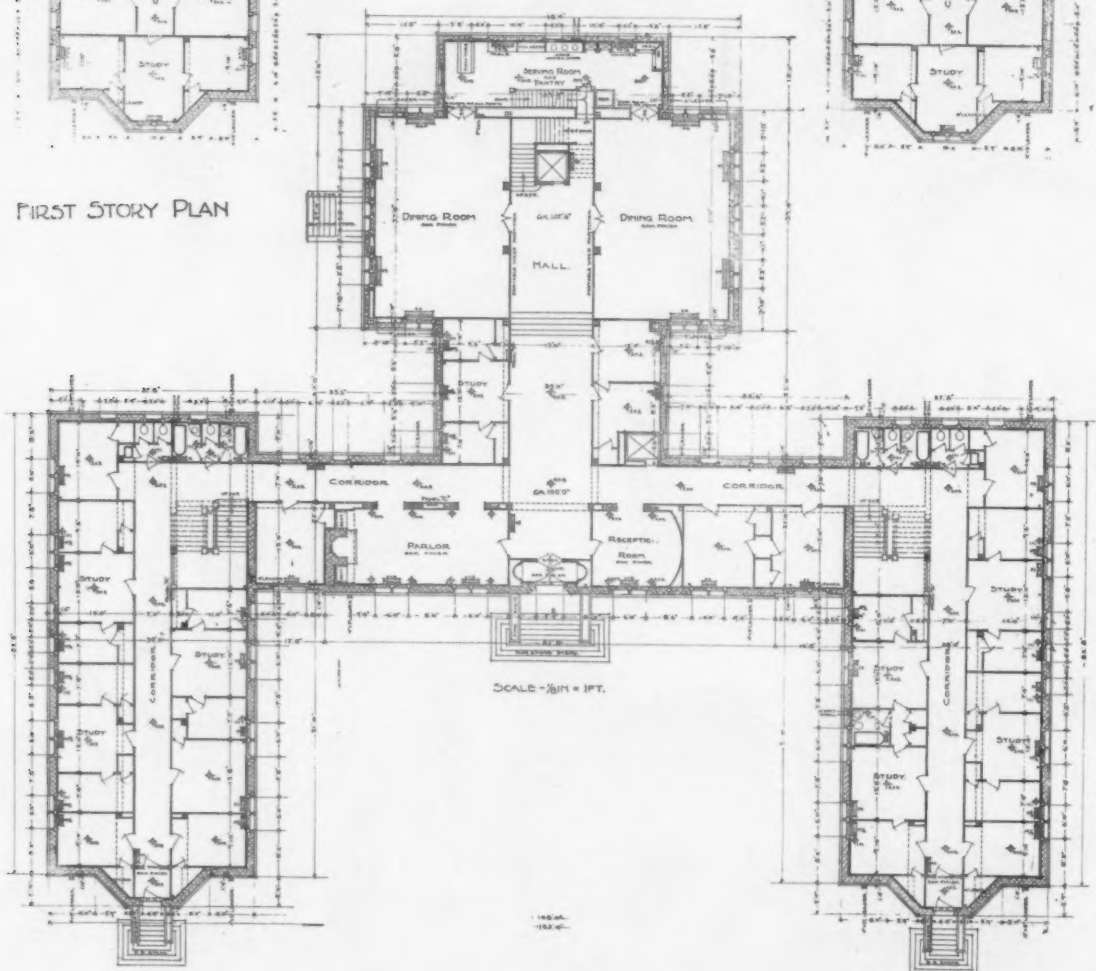
NOTE: ALL DIMENSIONS ARE TO ROUGH MASONRY AND TO CENTRES OF PARTITIONS
SIZES OF FINISHED DOORS
BETWEEN ROOMS AND CORRIDORS 3' 0"
BETWEEN ROOMS 2' 0"
BETWEEN ROOMS AND CLOSETS 2' 0"
WATER CLOSET AND BATH ROOMS 2' 0"
BETWEEN CORRIDOR AND TOILETS 2' 0"

INDICATION OF MATERIALS

CONCRETE	
BRICK AND SLAB	
TERAZZO FLOOR	
PLASTER	
WALL PAPER	



FIRST STORY PLAN



SCALE - 1/8" = 1 FT.

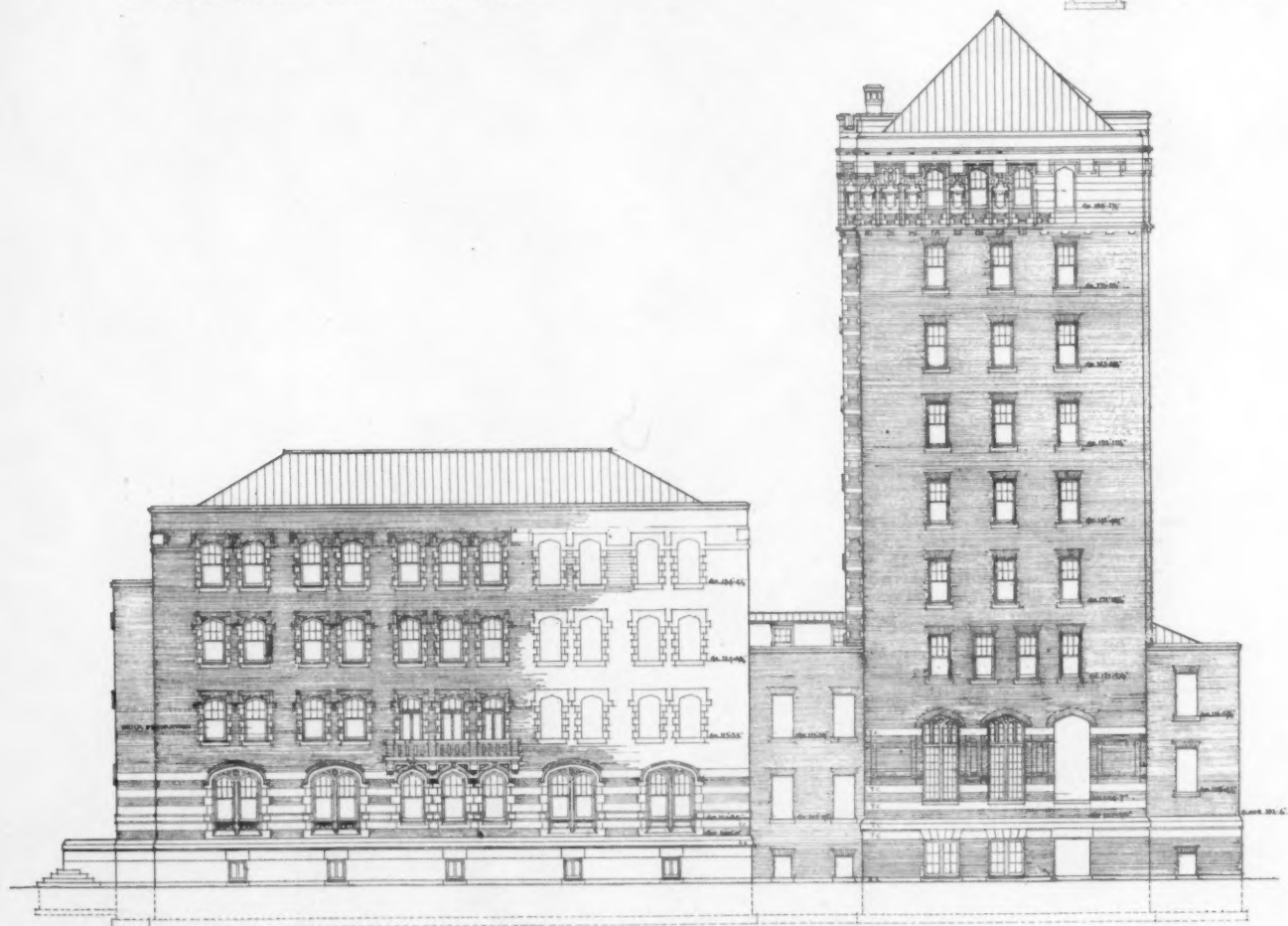
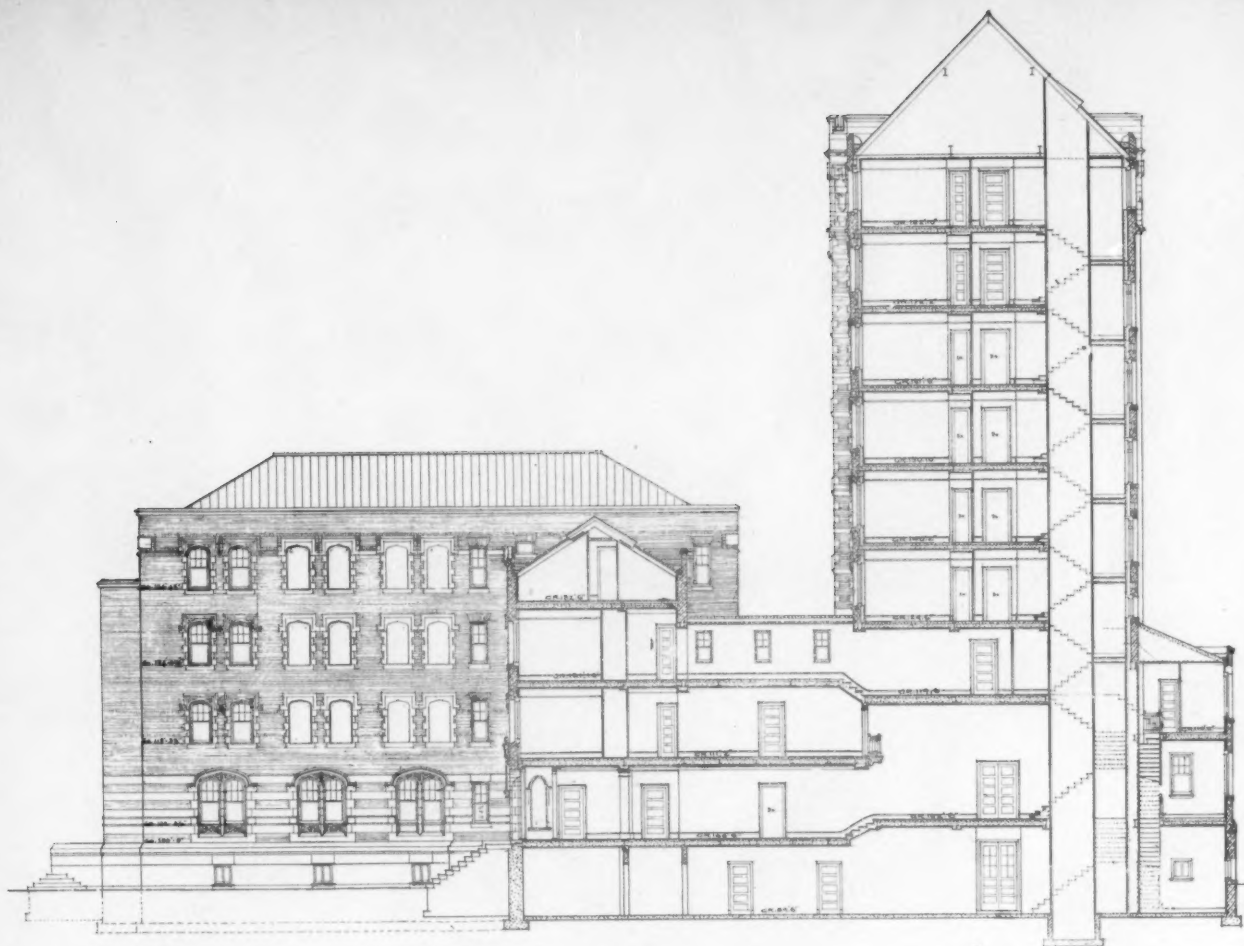
PLANS: DORMITORY BUILDING, VASSAR COLLEGE, POUGHKEEPSIE, N. Y.

Pilcher & Tachau, Architects.

The American Architect and Building News.
Regular Edition.

Copyright, 1907, by The American Architect.

Volume XCI, Number 1637.
May 11, 1907.



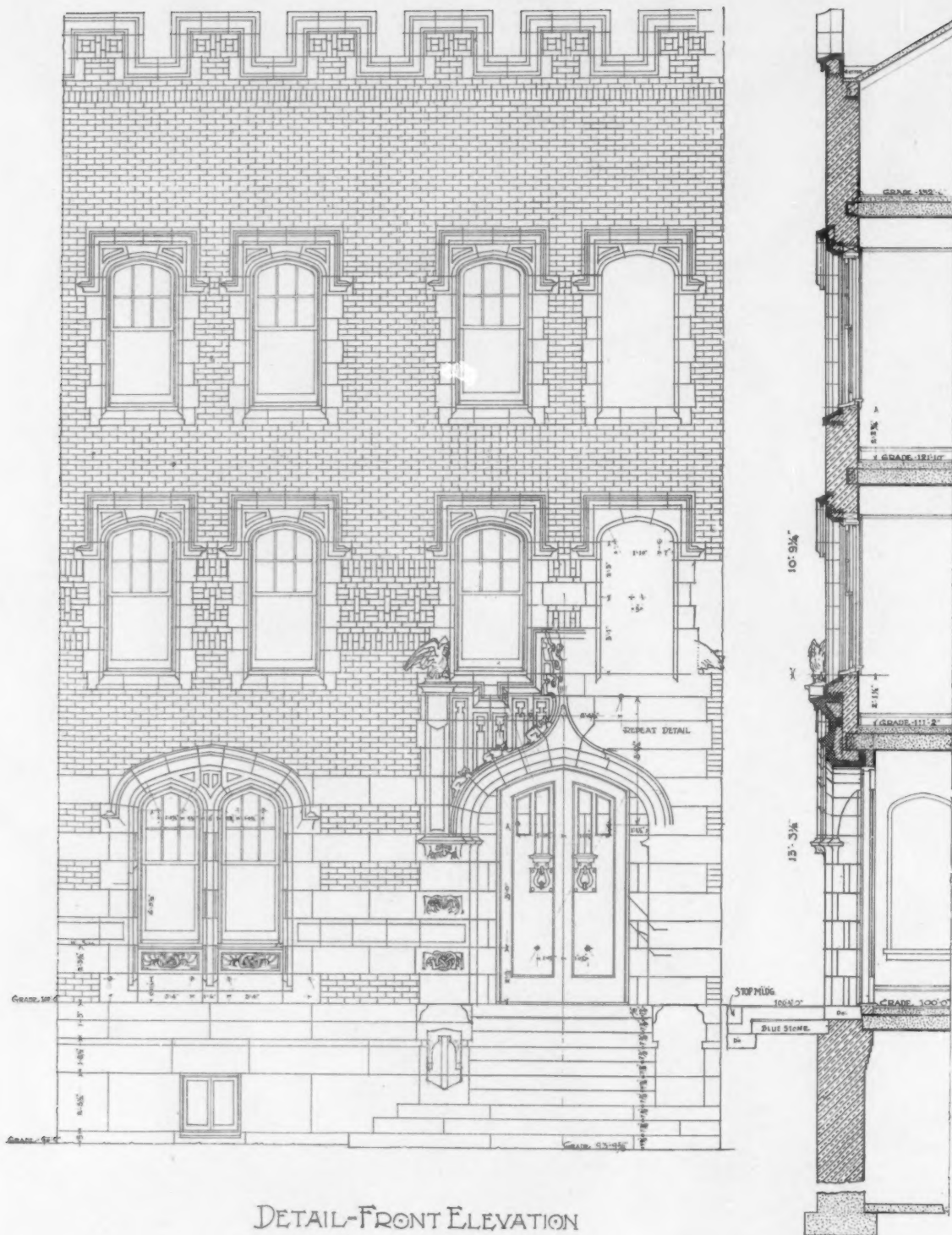
SIDE ELEVATION AND SECTION: DORMITORY, VASSAR COLLEGE, POUGHKEEPSIE, N. Y.

Pilcher & Tachau, Architects.

The American Architect and Building News.
Regular Edition.

Volume XCI., Number 1637.
May 11, 1907.

Copyright, 1907, by The American Architect.



DETAIL-FRONT ELEVATION
MAIN BUILDING OF DORMITORY

DETAIL OF MAIN FRONT: DORMITORY BUILDING, VASSAR COLLEGE, POUGHKEEPSIE, N. Y.

Pilcher & Tachau, Architects.

The American Architect and Building News.
Regular Edition.

Volume XCI., Number 1637.
May 11, 1907.

Copyright, 1907, by The American Architect.

He would rightly infer that it was not intended to hew the brickwork into clustered shafts and mouldings, and until he detected the proposed scheme of marble and mosaic decoration, his only conclusion would be that it was intended to plaster the whole surface with a view to mural decoration—or whitewash.

But let us assume that our visitor is one of those Greek architects who, we are told, crossed the Adriatic to build St. Mark's, Venice. On approaching the western façade he would be disappointed not to find a spacious and well-lighted outer narthex, forming an ambulatory or vestibule comprising all the main entrances, but this feeling of disappointment would soon give way to one of satisfaction when he entered the nave and realized the striking influence of his own work, after ten centuries of time. The main structural ideas, necessitated by the statical requirements, would be familiar, and so would the proposed method or scheme of applied decoration.

He would note, however, with regret that the cruciform or symbol on the plan appeared to be tolerated rather than emphasized, and we should hasten to explain that, though the architect's starting-point was the Cross, his ultimate idea was an unbroken nave, or hall, some twenty feet wider than St. Mark's, and that the transepts should not be regarded as part of this space, but rather as extension of the eastern chapels.

"I see that is so," he would respond, "but in our basilica at Venice we made the transepts as important as the nave, and covered them with domes in the same way, and I cannot help feeling that this arrangement—apart from any religious sentiment—is a more perfect ideal, and gives additional charm or variety to the interior."

"Possibly," we should cautiously observe, "and it may interest you, sir, to know that your church at Venice has been so much admired—since your retirement—that its predominant idea has been copied elsewhere almost line for line. And it may still further surprise you to learn that the architect's first conception for the Westminster Cathedral was a bold attempt to realize these very qualities that appeal to you so strongly."

Regarded as the tentative scheme of a great architect for so important a work, the first sketch plan, made twelve years ago, is interesting, though it doubtless lacks the homogeneity and the statical completeness of the final plan. And should our friend be curious to know why this first conception was abandoned, we should have to explain that the more the architect considered the matter the less satisfied he felt with the transeptal arrangements and the "crossing"; the abutment for these parts, in the east, was insufficient, and the complications connected with the exterior were not encouraging; then it was decided that the eastern termination of the church should not be used as a sanctuary, but as a choir; it was also decided to limit the sacristies to one side of the building, and to rely on the aspiration of a single campanile rather than on the conflicting efforts of two. In the revised plan the sanctuary and the choir have changed places, aisles have been introduced between the sanctuary and the eastern chapels, thus improving the abutment, but necessitating the abandonment of the apsidal terminations of the transepts, in order to provide suitable approaches to the eastern chapels. The transepts having now lost their peculiar form, we find the architect resorting for internal effect to another ideal, which, in the course of his practice, had become so indelibly stamped on his artistic temperament that it invariably appeared in the churches designed by him. We refer to the unbroken continuity of the nave arcades and vaulting across the transept openings, without entirely sacrificing the cruciform plan. This unbroken rhythm, or repetition of parts, produces an impression of length and height—a vista, if you will—that was most attractive to the English architect. And we should ask our visitor whether a similar effect was not produced by filling in the side arches of the great prototype at Constantinople. "Quite so," he would reply, "but in that case the artistic effect of the expedient was not the primary object, and the buoyancy of the culminating dome has scarcely been impaired. Permit me, further, to say that I think I now realize what I may term the vital difference between your cathedral and our great churches of the East. At Constantinople and at Venice the supports are concentrated, or limited to a few positions, whereas at Westminster, in addition to the main supports, auxiliary piers and arches are introduced that give a distinctive character to the design, suggestive, if I may say so, of a commingling of our Eastern with your Western methods; it is only in the sanctuary of your cathedral that I can detect the structural lines of the Greek type reproduced in their integrity."

Again, it would be still more interesting to some of us to know the views of yet another architect, of a period still more remote—one of those builders of Imperial Rome whose colossal works are still the wonder and admiration of the world. We should prefer to conduct this gentleman, blindfold, into the cathedral, and suddenly reveal to him the vast expanse of its interior; then, if he did not think that he was in the tepidarium of a large bathing-establishment, we should say that he had never seen one. The length of the nave agrees with that of the central hall of the *Thermae of Diocletian*, but the width, instead of being merely sixty feet, as it is, should be increased to eighty feet; then, if the secondary piers and arches are obliterated—thus reducing the supports to eight in number—and the pendentive system of vaulting changed into the groin-vaulting of the Romans, the illusion will be well-nigh complete.

On leaving the building our Roman visitor would be startled, not only by the determined aspiration of the campanile, but by the ornate qualities of the exterior generally; he would miss the sturdy vigor of his own work, and his limited acquaintance with architectural styles would not enable him to detect the strong influence that Byzantine, Romanesque and Renaissance detail have had on the design.

Having now, by retrogression, drifted to the source of the Renaissance, there is an obvious temptation to overleap the intervening ages at a bound, and so reach that "harbor of refuge," that "sheet anchor" of the modern practitioner. We do not, however, propose to invoke the shade of any past, nor the person of any living votary of that accommodating and fashionable style; and cordially as we should welcome the apparition of the greatest architect of the English Renaissance, we appreciate the delicacy of the situation, and proceed without further delay to take a closer view of our subject.

You will have gathered that the dominating factor of the problem worked out by the architect has been a spacious and uninterrupted nave, covered with domical vaulting, and it will be obvious to you that the exceptional width of the space to be covered called for exceptional height, if due proportion of the interior was to be maintained.

Thus the difficulties of support and abutment were soon realized, and in selecting the pendentive dome of shallow concavity for the roofing, the architect believed that the weight and the pressure would be reduced to a minimum. By showing the domes outside, not only was an extraneous roof dispensed with, but full advantage of the height was gained for the interior.

In the disposition of the piers and abutments, with a view not only to the sustentation of the pressure, but to reserving as much space as possible for the aisles, chapels and galleries, a system has been adopted not unlike that to be seen in most Gothic cathedrals, where huge, yet narrow, counterforts are projected at intervals, and stiffened by transverse walls, arcading and vaulting. But while in a Gothic cathedral these counterforts are generally most conspicuous features outside the building, at the Westminster Cathedral they are practically limited to the interior, the spaces being entirely utilized. It may be noted, in passing, that in the latest instance of cathedral design in this country both these methods have been rejected in favor of one in which all buttresses, as such, are avoided by deeply recessing the alternate bays as transepts; and should this arrangement involve a sacrifice of that uninterrupted succession of parts that Mr. Bentley so much admired, it will be admitted that this is not the only quality that can be legitimately aimed at, and it is probable that the result at Liverpool may disclose quite opposite qualities that will fully compensate for the loss referred to; at present we can only wish every success to the young architect who is now engaged on this important work.

Confining our attention for a time to the nave of the cathedral, let us more carefully examine the counterforts and the vaulting they sustain. A reference to the plans will show you that only in one instance is a main counterfort permitted to retain what may be termed its simple, unaffected character, all the others being more or less influenced or modified by the exigencies of the plan; thus two of them form the flank walls of the transepts, where, on the east, they are further strengthened by the walls and vaulting of the sanctuary so as to resist the cumulative pressure of the nave vaulting. At the west end of the nave the corresponding abutment has been very considerably affected, not to say weakened, in the upper part by the retiring disposition of the western façade, a concession to light-and-air claimants.

Of the secondary counterforts, those dividing the transepts have also a distinct and complicated character, while the others

retain their simple form—excepting that next the campanile, but this of course affects only one side of the building.

The proportions of each compartment of the nave are those of a cube, up to the springing of the main arches 60 feet from the floor. Another 30 feet 4 inches and we are at the springing of the domes; the total internal height being 111 feet, or about 10 feet higher than the choir of Westminster Abbey.

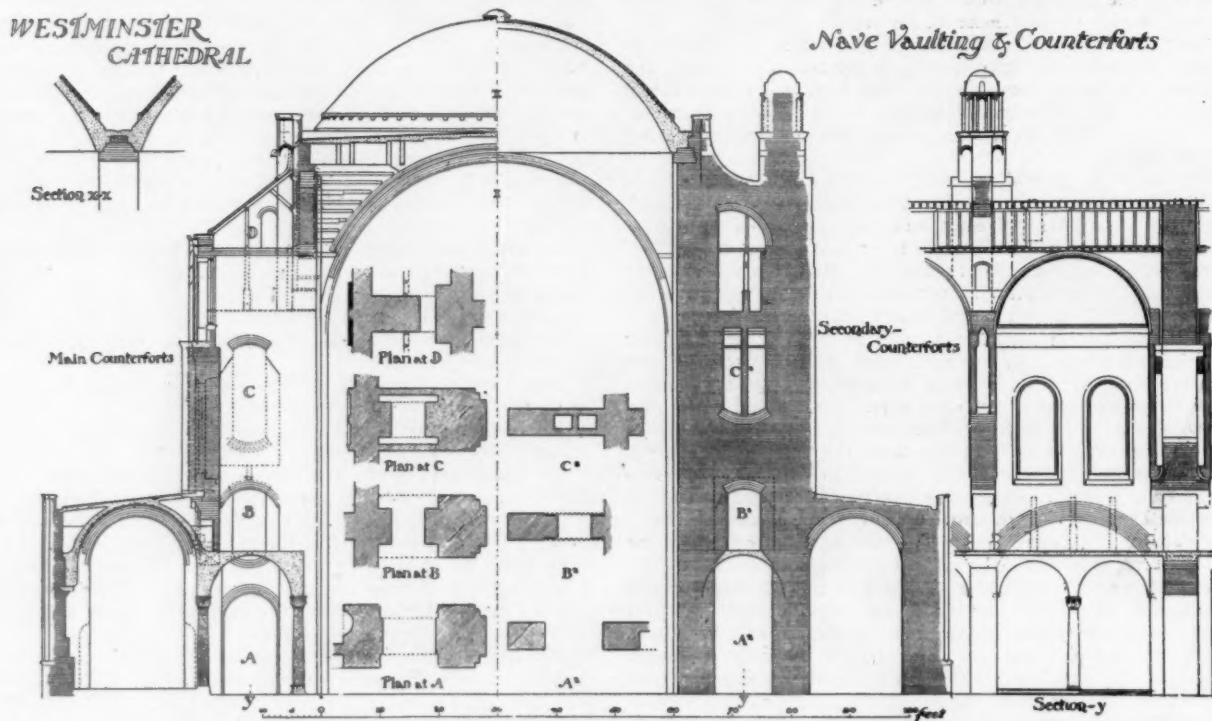
The extreme projection of the counterforts is 48 feet, but just above the chapel vaulting this projection is suddenly reduced to 24 feet, at which it is maintained to a height of nearly 90 feet. The lower projections—forming the divisions between the chapels—are but little more than flying-buttresses, filled in with thin walls, so as to form recesses for the altars.

The enclosing walls, with the brick vaulting over the galleries and transepts, serve of course to stiffen the counterforts and to increase the abutment; but the lower concrete vaulting of the aisles and chapels is not so important in this respect, and its construction was deferred until the main parts of the building were finished and the full pressure of the superstructure had been realized.

And here the suggestion can scarcely be evaded that this part

You will now see that the chapel arcades and vaulting are relieved of all extraneous weight, and it has been possible to make the arcades very slender, thus gaining extra space for the chapels, and imparting to these minor parts of the building a suitable relative proportion or scale. You will also now realize the importance of the galleries, in disguising or masking the apparent weakness of the construction behind—just as a balcony is often projected along a façade as an antidote against the weak appearance of a ground-floor story.

The archways formed in the lower part of the counterforts to preserve the continuity of the aisles, galleries and passages have been kept as small as possible, but in the upper parts hollow spaces have been left to economize material. These spaces were not enclosed until the brickwork had been exposed some time to dry, and small openings for ventilation were left in the upper and lower parts of the cavities to facilitate the drying after the enclosing walls were built. It was also desirable to keep these walls down until the cavities were arched or corbelled over—as the case might be—to prevent the accumulation of rubbish that would have blocked up the ventilators at the bottom.



of the design does not so exactly express the construction as do some of the other parts; for the massive walls of the triforium are not—as might be supposed—supported on the arcades that divide the chapels from the aisles, but on segmental relieving-arches, turned over these arcades between the counterforts and concealed in the pockets of the vaulting. The span of each relieving-arch is twenty-five feet, and the skewbacks are not cut into the piers, but are formed on granite springers that project beyond.

This expedient to reduce the span and maintain the piers intact was most essential next the transepts, where the triforium wall suddenly stops, and the abutment has been weakened by the formation of a passage in the wall of the transept. In view of this, and the complicated section of the relieving-arches—due to the difficulty of clearing the vaulting of the chapels—you may perhaps wonder why so favorable an opportunity for the use of steel girders that involve no thrust and occupy but little space should have been neglected; but the architect resolved not to introduce into the cathedral any ironwork as a support, though, as we shall see, he did not feel justified in objecting to its use as a tie.

The projections or buttresses between the lower windows of the triforium or gallery have an artistic value, though they serve no structural purpose. They are apparently supported on the flat roofing of the chapels, but they are really dependent on stone corbels that rest on the relieving-arches and blush unseen.

The main counterforts are 10 feet 6 inches wide, and from these, at a height of 60 feet from the floor, spring the large transverse arches 6 feet 9 inches wide that support the pendentives and the domes. As the thrust exerted by these arches and the pendentives is at a level much below the springing of the domes, it was not considered necessary to raise the main counterforts higher than the lean-to roof of the passage over the triforium vaulting; but the secondary counterforts, placed opposite the centers of the domes, are raised well above these roofs and weighted with turrets, the supporting arches and wall at this level being comparatively thin.

We have already referred to the exceptional character of the counterforts dividing the transepts. These, you will notice, consist on the ground plan of two piers, one next the nave, the other next the outer wall, the space between being arched over, just above the level of the gangways or galleries that cross the transepts. To dispel the weak appearance of the pier next the nave, and to ensure a uniformity of scale on the ground floor, the openings between the piers are filled in with arcades that agree in height with those of the galleries; but these arcades do nothing towards counteracting the thrust of the arches over, and, indeed, they were not inserted until long after the main parts of the structure were built. In building the pier next the nave the precaution had been taken to make it nine inches wider than the corresponding piers of the nave, but this was not considered sufficient, so a rolled steel tie was inserted just below the spring-

ing of the arches, where it would be eventually concealed by the arcades; and at a higher level, just above the crown of the arches, another similar tie was built in. When it is considered that the turrets of these transept counterforts are directly over the arches, and that the arches sustain nearly half the weight of the vaulting and the roofing, and that one of the domes is partly dependent on the pier, it will be admitted that these precautions are not altogether uncalled for.

At the west end of the nave the bewildering ramifications on the ground floor promise well for the abutment at higher stages of the work; but as we ascend the gradual recession of the western façade soon dispels the illusion, until, on the top stage, where the pendentives exert most pressure, we find that counter resistance has been reduced to a minimum. Another effect, due to these legal restrictions, appears inside the building, where the perimeter of the western dome seems to be too near the large west window—a deep barrel-vault over the window, as originally intended by the architect, would have afforded better resistance and greatly improved the interior.

Having now considered the main features of the nave, regarding support and abutment, we will go back in imagination to that stage of the work when the main supporting arches had been turned, and the centering for these was still in position, there to remain until the final weight had been imposed.

On the north and south sides these main arches were not turned until the lower secondary arches and the brick filling over were finished, so that the brickwork served as centering for that portion of the main arch that passes through the wall; but for the projecting portion, on which the pendentives rest, it was, of course, necessary to provide thin centering of wood. At the springing level of all the arches and brick barrel-vaulting, rough stone corbels were built in to support the centering, the projections being afterwards worked off. The spandrels of the main arches are filled in up to the crown level with brickwork, set back $13\frac{1}{2}$ inches from the faces of the arch, to reserve a seating for the concrete of the pendentives. The visible junction of the brick arch and the concrete forms merely an angle or line, and if we follow these lines down to the springing where the supporting arches separate we shall find them meet, so that the surface of the pendentive expands or develops from a mere point, but this apparent weakness in the construction is obviated by the very common method of building the lower portion of the arches and the pendentives of brick, in horizontal courses; thus a continuous joint is avoided by cutting the brickwork to the required angle, and the top of the brick corbelling forms a seating of considerable area for the solid concrete backing.

The lower portion of the pendentive, just described, rises to a height of 13 feet above the springing; fixed centering for this part was not necessary—the accuracy of the demispherical curves being ensured by the application of movable templates. But, for the upper part of the pendentive, closely-boarded centering was necessary and to support this at the bottom a projecting stone landing was built in on the top of the brick corbelling, the projection being afterwards worked off. To secure bond for the concrete backing of this upper part, and to distribute the bearing, six-inch stone landings are built in at intervals, in the height across the angles formed by the enclosing spandrel walls.

Projecting courses of brick are also formed on these walls to serve as a key for the concrete. To limit the weight, the top part of the pendentive has no solid backing; it is, in fact, built as part of a dome, having a shell two feet six inches in thickness, but on this shell radiating counterforts or ribs are formed that incline up to the base of the dome, and on these counterforts there are light sleeper walls that support the flat roofing around.

To ventilate the cavities $4\frac{1}{2}$ -inch drain-pipes were inserted in the shell, and counterforts communicating with the interior of the building. Constructionally, the pendentives may be regarded as corbels, by which the weight of the domes is not merely sustained, but directed to the piers.

(To be continued.)

ROMANCE AND ST. MARY-LE-BOW.¹

ST. MARY-LE-BOW Church is one of ancient foundation, although the present building only dates from 1671. John Stow, as is usual with him, tells us much about the earlier church. He died some sixty years before the Great Fire of London, so that we have the advantage of learning from his "Survey

of London" many things about the churches which the fire destroyed. One important matter, however, we always miss in his writings. We are not able to picture from their perusal the architectural character and the ornamental Gothic details which abounded. We can only judge from the examples which are left to us that ecclesiastical London in a structural sense was a city of infinite architectural beauty. Stow tells us that "St. Mary Bow, in the reign of William Conqueror, being the first in this city built on arches of stone, was therefore called New Mary Church, or St. Mary de Arcubus, or Le Bow, in West Cheaping." He instances a similar example of the use of the word "Bow" in Stratford bridge, which was built by Henry I.'s queen, Matilda, with arches of stone, and was thus called Stratford-le-Bow. The antiquity of the Court of Arches may be judged from the fact that John Stow mentions it; he says that the Court "is kept in this church, and taketh name of the place, not the place of the Court; but of what antiquity or continuation that Court hath there continued I cannot learn." The older church had its vicissitudes. In the year 1090 the roof was blown over by the wind, and several persons were killed; four of the rafters, in length 26 feet, "with such violence were pitched in the ground of the High Street, that scanty 4 feet of them remained above ground, which were fain to be cut even with the ground, because they could not be plucked out, for the city of London was not then paved, and a marish ground." Then again, in 1196, a certain person of seditious tendencies, possessing an aristocratic name, William Fitz Osbert, seized upon Bow steeple, and fortified it with munitions and victuals. But his triumphant defence was short-lived; fire and smoke were brought to the aid of the attacking forces and bloodshed ensued, and his inglorious career was ended by hanging at Smithfield Elms, whither he was dragged by the heels.

Again in 1271 disaster occurred to Bow Church, when a great part of the steeple collapsed, killing many men and women. In 1284 one Laurence Ducket, a goldsmith, came into collision with one Ralph Crepin in West Cheap, and having grievously wounded him, fled into Bow Church. Ralph Crepin's friends entered the church at night and killed Ducket by hanging, after which they hung him up in such a manner as to suggest suicide; in fact, this view of the matter was taken at the inquisition (or inquest, as we should call it now), and Ducket's body was dragged by the feet to a ditch without the city for burial there. But the truth of the matter afterwards came out, and Jordan Goodcheape, Ralph Crepin, Gilbert Clarke and Geoffrey Clarke were attainted, a certain woman named Alice, the chief cause of the mischief, was burnt, and sixteen men were drawn and hanged, besides others that, after long imprisonment, were "hanged by the purse." The body of Ducket was taken up and buried in the churchyard, and the building itself was interdicted, the windows and doors being stopped up with thorns. We have said that the steeple fell in 1271, and it appears from Stow's record that the rebuilding was only partial at first, and was gradually added to until at length, in 1469, it was ordained by Common Council that the Bow bell should be nightly rung at nine of the clock. Then John Donner, mercer, by his will of 1472, left two tenements in Hosier Lane for the maintenance of Bow bell. The couplet relative to the late ringing of Bow bell has often been quoted; here is what John Stow says regarding it: "This bell being usually rung somewhat late, as seemed to the young men 'prentices and other in Cheap, they made and set up a rhyme against the clerk, as followeth:

Clarke of the Bow bell with the yellow locks,
For thy late ringing thy head shall have knocks.

Whereunto the clerk replying, wrote:

Children of Cheape, hold you all still,
For you shall have the Bow bell rung at your will.

A stone building called a "seldam," or shed, was erected by King Edward III. on the north side of the church facing Cheap-side, then known as West Cheap. The object of this structure was to enable the king and his court to witness the jousts and processions which were frequently held in those days. It was probably not without reference to that fact that the present external gallery in the tower facing Cheap-side was constructed.

The tower of the earlier church was surmounted by four pinnacles from which flying-buttresses supported a central pinnacle. This probably suggested the idea to Wren, which led to his adopting a similar plan in the construction of the tower and spire of St. Dunstan-in-the-East.

The church was the first to be rebuilt after the Great Fire, although repairs to St. Sepulchre and St. Christopher, Thread-

¹Extracts from a paper read at a meeting of the Upper Norwood Athenæum by Mr. T. Pitt, F.C.S.

needle Street, were commenced in the previous year, 1670; in these cases rebuilding was not necessary. Four other churches in the immediate neighborhood of St. Mary-le-Bow have disappeared, and the parishes are now united; they are Allhallows, Honey Lane; Allhallows, Bread Street; St. John Evangelist, and St. Pancras, Soper Lane. The association of John Milton with Allhallows, Bread Street, is recorded on a tablet placed on the house which occupies the site of that church, with a medallion having the poet's head in relief. Another tablet, which was placed on Allhallows Church early in the nineteenth century, was removed in 1876, when that church was destroyed, and placed on the west wall of St. Mary-le-Bow. It records the poet's birth in Bread Street on Friday, December 9, 1608, and his baptism in Allhallows, Bread Street, in the same month.

The present tower of St. Mary-le-Bow consists, first, of a plain square tower 32 feet 6 inches wide by 83 feet in height, above which are four stories averaging 38 feet each; the first, a square belfry, adorned with Ionic pilasters, is 39 feet; the next, which includes the beautiful circular peristyle of twelve Corinthian columns, is 37 feet; the third comprehends the small lantern, and is 38 feet high, which is also the height of the spire, the whole making a height of 235 feet [Fergusson]. The spire is surmounted by the famous dragon, of which it was predicted that "when the dragon on Bow Church kisses the cock behind the Exchange great changes will take place in England." This actually happened in 1832, when the two figures were down and cheek by jowl in the repairer's yard. Then came the Reform Bill.

ILLUSTRATIONS

DORMITORY BUILDING FOR VASSAR COLLEGE, POUGHKEEPSIE, N. Y.
MESSRS. PILCHER & TACHAU, ARCHITECTS, NEW YORK, N. Y.:
FIVE PLATES.

CHATTANOOGA STATION, CHATTANOOGA, TENN. MR. DONN BARBER,
ARCHITECT, NEW YORK, N. Y.: THREE PLATES.

Additional Illustrations in the International Edition.

HOUSE OF T. M. ARMSTRONG, ESQ., PITTSBURGH, PA. MESSRS. ALDEN
& HARLOW, ARCHITECTS, PITTSBURGH, PA.

HAZELWOOD BRANCH: CARNEGIE PUBLIC LIBRARY, PITTSBURGH, AND
THE CARNEGIE LIBRARY, LAWRENCEVILLE, PA. MESSRS. ALDEN &
HARLOW, ARCHITECTS, PITTSBURGH, PA.

DOORWAYS OF CARNEGIE LIBRARY, LAWRENCEVILLE, AND OF THE
FARMERS' BANK BUILDING, PITTSBURGH, PA. MESSRS.
ALDEN & HARLOW, ARCHITECTS, PITTSBURGH, PA.

EAST LIBERTY BRANCH: CARNEGIE PUBLIC LIBRARY, PITTSBURGH, AND
CARNEGIE LIBRARY, OAKMONT, PA. MESSRS. ALDEN & HARLOW,
ARCHITECTS, PITTSBURGH, PA.

NOTES AND CLIPPINGS

THE HOTEL DARLINGTON DISASTER, ONCE MORE.—An echo of the Hotel Darlington disaster of three years ago was heard in the Supreme Court last week, when a jury in Justice Guy's part of the court awarded Emil Haenschen, as administrator of his deceased son, \$15,000 for the boy's death against the Roebling Construction Company, the Allison Realty Company, and Pole & Schwandtner. The Hotel Darlington, while in course of construction, collapsed, killing twenty-five persons and injuring thirty. Emil Haenschen's son was a plumber nineteen years old.—*Exchange*.

YATE.—Recent tests of the hardwoods of Western Australia have revealed the extraordinary properties of yate, believed to be the strongest of all known woods. Its average tensile strength is 24,000 pounds to the square inch, equalling that of cast-iron. Many specimens are much stronger, and one was tested up to 17½ tons to the square inch, which is equal to the tensile strength of wrought-iron. The sawn timber of yate is probably the strongest in the world. The tree grows to a maximum height of 100 feet, and has sometimes a diameter of 2½ or even 3 feet.—*N. Y. Tribune*.

A PEATY SUBSOIL DANGEROUS.—The risk of a peaty subsoil has been displayed in the Wolverhampton workhouse. There where the boiler-house was placed there was a settlement through which one of the boilers was affected. A bed of concrete had been placed beneath the premises but it also sank. After an excavation to a depth of 7 feet 6 inches the cause of the damage was ascertained.

There was a peat stratum which originally was 2 feet 6 inches thick, but apparently it became ignited through the heat of the boilers, and in consequence the depth was diminished one-third. Additional concrete will have to be used, and the outlay on re-setting the boilers is estimated at £600. In similar cases where the peat is only a couple of feet thick it would be better to remove it before the concrete is put in. Some of the floors of the workhouse are attacked by dry-rot, which is supposed to arise from the obstruction of the openings for ventilation by rubbish.—*The Architect*.

WESTMINSTER PALACE FRESCOS.—The news that the House of Lords Committee is once more to inspect the ruined frescoes of the Palace of Westminster, which are for the purpose to be disinterred from beneath the wallpaper long since drawn over them as a means of decently burying the remains of what had been the young hope of a nation's enthusiasm, once more draws attention to this highly important question of mural paintings in London. These frescoes were themselves the result of a commission, and the fact that this body so poorly understood the atmosphere of their own city that they sanctioned a series of works which, though admirable themselves, could not last for half a century, may perhaps suggest a modest estimate as to the probable outcome of the present inquiry. It seems, however, to be forgotten that the Prince Consort's passion for fresco, which was mainly responsible for the ruined frescoes in the Lords, also originated another set in the summer house of Buckingham Palace. Men like Landseer, Eastlake, Leslie, Maclise, Dyce and Stanfield worked at these panels, and so long since as 1846 they were published with a preface by Mrs. Jameson. Nothing is heard nowadays of either frescoes or illustration, though the question naturally arises at a juncture like the present as to whether they have fared any better than those in the House of Lords. Can any of our readers throw light on the subject?—*London Globe*.

BRIDGE OF REINFORCED CONCRETE.—In strong comparison with the endurance qualities of other building material are those of reinforced concrete. It is in no sense subject to decay, and when it is used in sea water for the foundation of a pier or wharf it is unaffected by the teredo, which so quickly destroys timber. It is not affected by rust nor by the carbonic acid in the atmosphere. When properly constructed it requires no maintenance charge for painting or for any other kind of protective treatment. The various tests which have been made by the building bureaux of great cities, as well as by the involuntary test of great conflagrations, have shown that its power for resisting fire—and even a combination of fire and water—is greater than that of any other known type of building construction. The purposes to which reinforced concrete are now put are almost innumerable. The illustration shows a bridge of this material at Playa Del Rey, near Los Angeles. The extreme length of this structure is 205 feet 8 inches. Its span is 146 feet, which is 15 feet longer than any other cement bridge span in the world. The width is 19 feet, the spring 18 feet and the height above water 20 feet.—*Philadelphia Ledger*.

THE SIPHON UNDER THE HUDSON AT STORM KING.—In fifteen years New York City will be drawing its water from the great Ashokan reservoir, in the heart of the Catskills. The water will be brought to the city by a huge concrete and steel aqueduct, 100 miles long, and the largest in the world. The most striking feature of this aqueduct will be the stupendous siphon under the Hudson at Storm King. This is a feat of tunneling that puts to blush all the tunnels around New York City. The subways under the Hudson now constructing go down about ninety feet below the water; but the Storm King siphon will be sunk 650 feet below the surface of the water and 1,100 feet below the aqueduct gradient. If this were built on the air-pressure principle, used in the East River tunnels, all the workmen would perish from the pressure as soon as the work had gone a little below 100 feet under the water. As the engineers found it would be necessary to go below the fatal limit at Storm King, they decided to build a tunnel or siphon so far down below the river bottom that it would be in solid rock and not allow water to leak in. Going down over 600 feet, they calculate that little or no water will come in, and therefore they will not have to do the work or dig under pressure from compressed air.—*C. H. Cochrane, in the Broadway Magazine*.

POSITIONS OPEN.

FIRST-CLASS architectural draughtsman wanted at once. Good salary to right man. Write full particulars and state salary expected. Consolidated Engineering & Construction Co., Syracuse Savings Bank Bldg., Syracuse, N. Y. (1635-1637)

WANTED—Architectural draughtsman; man of at least 10 years' experience desired; permanent position for right man. Merrick & Randall, Syracuse, N. Y. (1635-1637)

WANTED—Architectural draughtsman, familiar with working plans for interior and exterior stone work. The Schilling Company, Albany, N. Y. (1635-1637)

THE Meyer Sniffen Company, makers of fine plumbing fixtures, require the service of a man to represent them among architects, mainly in the Metropolitan District. 11 West 36th street, New York. (1635-1637)

WANTED—Architectural draughtsman; state experience and salary expected. Pollmar & Ropes, Architects, Detroit, Mich. (1637-1638)

WANTED—Architectural draughtsman well up in details. White & Hussey, Architects, Lansing, Mich. (1637-1638)

POSITION WANTED.

MANAGER or chief engineer (contracting) wants position; managing expert reinforced concrete steel and general construction; state particularly location, etc. Address 18-B, care American Architect. (1635-1637)

ARCHITECTURAL engineer desires management business and engineering department of architectural firm structural engineering, specifying, superintendence, etc. Address 18-A, care American Architect. (1635-1637)

PROPOSALS.

Treasury Department, Office of the Supervising Architect, Washington, D. C., May 2, 1907.—Sealed proposals will be received at this office until 3 o'clock p. m. on the 12th day of June, 1907, and then opened, for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring) for the U. S. Post Office building at Bedford, Indiana, in accordance with the drawings and specifications, copies of which may be had at the office of the Custodian of the site, at Bedford, Indiana, or at this office, at the discretion of the Supervising Architect.—James Knox Taylor, Supervising Architect. (1635-1637)

Treasury Department, Office of the Supervising Architect, Washington, D. C., May 1, 1907.—Sealed proposals will be received at this office until 3 o'clock p. m. on the 6th day of June, 1907, and then opened, for the construction complete of the extension to the U. S. Post Office and Court House, at Wichita, Kansas, in accordance with the drawings and specifications, copies of which may be had at this office or at the office of the Custodian at Wichita, Kansas, at the discretion of the Supervising Architect.—James Knox Taylor, Supervising Architect. (1635-1637)

Treasury Department, Office of the Supervising Architect, Washington, D. C., May 4, 1907.—Sealed proposals will be received at this office until 3 o'clock p. m. on the 13th day of June, 1907, and then opened, for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring) of the U. S. Post Office building at Meriden, Connecticut, in accordance with drawings and specifications, copies of which may be had at the office of the Custodian of the site at Meriden, Connecticut, or at this office, at the discretion of the Supervising Architect.—James Knox Taylor, Supervising Architect. (1637-1638)

Treasury Department, Office of the Supervising Architect, Washington, D. C., May 6, 1907.—Sealed proposals will be received at this office until 3 o'clock p. m. on the 17th day of June, 1907, and then opened for the construction (complete) of the U. S. Post Office at Webster City, Iowa, in accordance with drawings and specification, copies of

PROPOSALS.

which may be had at this office or at the office of the Postmaster at Webster City, Iowa, at the discretion of the Supervising Architect.—James Knox Taylor, Supervising Architect. (1637-1638)

Sealed proposals will be received at the office of the Commissioners of Plymouth County Court House, Brockton, Mass., until 11 o'clock a. m. on the 27th day of May, 1907, for the additions to the Plymouth County Court House in Brockton, according to plans and specifications prepared by J. Williams Beal, architect.

A certified check in the sum of One Thousand dollars (\$1,000) payable to the Treasurer of the County of Plymouth must accompany each proposal as a guarantee that the party awarded the contract will furnish satisfactory bond and sign contract within ten days after the awarding of the contract.

Plans and specifications may be seen on and after May 14, at the office of the Commissioners, Court House, Brockton, Mass., and at the office of the Architect, J. Williams Beal, 58-62 Summer street, Boston.

The right to reject any and all bids submitted is reserved.

SUMMER SCHOOL OF PAINTING

VINEYARD HAVEN, MASS.
(Island of Martha's Vineyard) Conducted by
ARTHUR R. FREEDLANDER

Third Season, June 15th to Sept. 15th
Special course for Students of Architecture to develop facility in the handling of color. Three criticisms per week. For prospectus, address
A. R. FREEDLANDER, 80 W. 4th St., New York

"THE LIBRARY OF CONGRESS"

20 Plates, folio. Price, \$5.00

THE AMERICAN ARCHITECT, Publishers,
New York and Boston

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

A RCHITECTS who are unfamiliar with the economical, durable, sanitary, artistic and fireproof qualities of Tiling as a covering for floors and walls in hospitals, railroad stations and all public buildings, and for the bath-rooms, kitchens, laundries, mantels, fireplaces, vestibules and porches of private residences, should write for

Tile in Economical Building

Durability of Tile

and other booklets, sent free to any architect by the

Information Bureau of Tile Industry

70 Corcoran Building
WASHINGTON, D. C.



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

HOUSTON, TEX.—Plans are being prepared for the Harris County Court-house. George Jones is County Clerk. No architect has been selected as yet. Cost, \$500,000.

JACKSONVILLE, FLA.—Plans of Architect L. M. Weathers, of Memphis, Tenn., for a Masonic Temple, to cost \$110,000, have been accepted. The building will be of reinforced-concrete, seven stories high, and of classic design. H. H. Jackson, 106 Main Street, is the architect.

JOHNSTOWN, PA.—A new Post-office building, to cost \$150,000, will be erected at this place by U. S. Government. Architect, J. Knox Taylor, supervising architect, Treasury Department, Washington, D. C. Brick and stone; fireproof; one story and basement.

KANSAS CITY, Mo.—Smith & Speck will erect a residence on Main and Thirty-eighth Streets. Cost, \$75,000.

The Grand Avenue Methodist Church will erect a combination office-building and auditorium on the site of the old building. The structure to be immediately erected to a height of four and possibly nine stories, with a foundation to carry a twelve-story building.

KNOXVILLE, TENN.—It is said that a new agricultural building will be erected at the University of Tennessee, to cost about \$100,000.

LAFAYETTE, IND.—Guno Kibele, of Muncie, is reported to have been engaged to

prepare plans for a hospital to be erected at the Soldiers' Home, the cost to be about \$50,000.

LAGRANGE, ILL.—S. S. Beman, of Chicago, is stated to have completed plans for a \$40,000 Christian Science church to be erected here.

Plans are being prepared for a hotel for Dr. G. M. Fox, at Fifth Street, between Harris Avenue and Cossitt Boulevard. C. L. Sackett, Ira J. Smith and J. A. Boyden are interested. Cost, \$100,000.

LEWISTON, IDAHO.—Bids will be received, until May 15, by the Commissioners of Nez Perce County for a Court-house, to cost \$100,000. Newton Gauntt is architect.

LOUISVILLE, KY.—Clarke & Loomis, 502 Fourth Street, are stated to have submitted plans to the Haldeman Warehouse Company for a \$75,000 building to be erected on Green Street.

The Trustees to the Elks' Lodge are contemplating to erect a \$100,000 building.

The erection of a Y. M. C. A. building, costing about \$250,000, is reported under consideration.

MILWAUKEE, WIS.—Plans for a \$1,500,000 Court-house on site of the present one, 160x242 feet, and having four stories and basement, have been submitted to a joint committee of the County Board by H. C. Koch, Wells Building, Milwaukee, with the suggestion that if the county could not issue bonds sufficient to erect the entire building

at once, it could be put up in sections, as the State Capitol is being put up. The Supervisors have voted to recommend the plan to the Board at large. The architect submitted another plan, which called for an additional building on a new site to be occupied only by the Probate Courts, Register of Probate, Register of Deeds and District Attorney. It would cost the county at least \$600,000 with site.

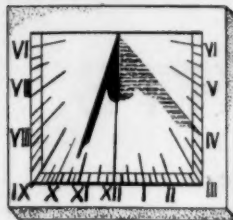
The building of a new Court-house, at a cost of \$1,500,000, is reported under consideration.

Kirchoff & Rose, architects, 201 Grand Avenue, have completed plans for a \$60,000 residence building for Joseph Uihlein, of the Schlitz Brewing Company. It will be solid brick, 50x109 feet, and situated on Lake Drive.

MINNEAPOLIS, MINN.—Plans are being prepared for a hospital for the Norwegian Lutheran Deaconess' Institute at Fourteenth Avenue, south, and Twenty-third Street. Cost, \$50,000.

The House has passed a bill appropriating \$700,000 to the University of Minnesota for the erection of an engineering building, to cost \$250,000, and \$450,000 for the extension of the campus.

MOBILE, ALA.—R. Benz & Sons have completed plans and specifications for the proposed hotel to be erected by Jos. B. Webster. The hotel will be five stories high, Renaissance style of architecture, reinforced-concrete fireproof construction, tile partitions with wood finishings. Bids for construction will be invited at once.



SUN DIALS for BUILDINGS

Marble, Granite or Stone
Write for Special Propositions to Architects
SUN DIAL Box 434 Pittsburgh, Pa.

PHOTOGRAPHY

We are now prepared to execute high class photographic work at a moderate price.

- ¶ OUTDOOR AND INDOOR VIEWS
- ¶ COPIES OF DRAWINGS IN LINE, MONOCHROME OR COLOR
- ¶ NEGATIVES UP TO 11x14 INCHES
- ¶ PRINTS OF ANY KIND

FOR PARTICULARS ADDRESS

THE AMERICAN ARCHITECT

No. 12 West 40th Street, New York

Modern Hot Water

Supply for Residence Use secured by means of the

MONARCH WATER HEATER

Instantaneous supply to every faucet in the house, within 30 seconds. No waits. No waste of gas or water. No storage boiler needed, but can be used with kitchen boiler when desired.



Everything modern in gas water heaters—with agents in all parts of the country. Be sure the Lion's Head is cast in relief, which is a guarantee of quality secured in no other heater.

MONARCH WATER HEATER CO.
Pittsburg, Pa.

WRITE US FOR NEAREST BRANCH

MONTCLAIR, N. J.—The Board of School Estimates on April 28 adopted a motion recommending the appropriation of \$175,000 for the building of a central grammar school. Plans for this building were prepared, but exceeded this amount. New plans will have to be prepared so as to bring the cost within the amount appropriated.

MONTPELIER, VT.—Plans are being prepared for the new City Hall building in Washington County. Cost, \$150,000.

MOOSE JAW, SASK., CAN.—The Canadian Pacific Railroad (E. P. Gutelins, Assistant Chief Engineer, Montreal, Que.), it is stated, will erect a hotel here, costing about \$175,000.

NEWARK, N. J.—The School House Committee of the Board of Education has adopted the plans of Nathan Myers, 238 Washington Street, for the manual training high school, and the plans of Runyon & Carey, 122 Market Street, for heating same. The plans provide for a four-story terra-cotta and rough brick building, to cost about \$400,000.

NEW BRUNSWICK, N. J.—The American Concrete-Steel Company, of Newark, N. J., it is said, has secured the contract for the construction of a three-story and basement office-building for the New Brunswick Fire Insurance Company. The building will be 50x156 feet, and constructed entirely of reinforced-concrete, at a cost of \$100,000. Geo. K. Parsell, supervising architect.

NEW HAVEN, CONN.—It is stated that a bill has passed the Senate authorizing the city to issue \$100,000 bonds for a hospital.

NEW KENSINGTON, PA.—The New Kensington Presbyterian Church will erect new edifice, to cost \$30,000. Rev. A. C. Denise is pastor. Structure will be of brick with stone trimmings, 78x100 feet.

NEW ORLEANS, LA.—It is reported that improvements are to be made to the Crescent City Jockey Club House (Louis A. Cella, stockholder), at a cost of \$100,000.

Plans are being prepared by R. Benz & Sons for the Terminal Hotel, to cost \$100,000.

NEW YORK, N. Y.—Plans are being prepared for a residence, 100x102 feet, by the West Side Construction Company, 321 West Ninety-first Street, to be erected at 118th Street and Morningside Avenue. Cost, \$175,000.

Architects Schwartz & Gross, 35 West Twenty-first Street, have prepared plans for a twelve-story mercantile building for Edward Friedman and Isidor Mishkind. Cost, \$450,000.

Emma L. Wesson and Eufasia Leland, 1 West Thirty-seventh Street, have awarded to Geo. Vassar's Son & Co., 111 Fifth Avenue, general contract to build a large four-story stone residence on a plot 39.11x54 feet, at 123 East Seventy-ninth Street, from plans which were drawn by Foster, Gade & Graham, 281 Fourth Avenue. Thomas Swain, 452 Fourth Avenue, has

the plumbing contract. Estimated cost, \$50,000.

Messrs. Sonn Brothers, 149 Church Street, are about to improve the entire block bounded by St. Nicholas Terrace, 129th, 130th Streets and Convent Avenue. The plot measures 216 feet on the avenue and 585 feet on the streets. The scheme calls for a group of eight large elevator apartment-houses, each 100x130 feet, with 25-foot gardens between each house. All courts will face the streets, considerably wider than required by law; the generous provisions for light and air throughout being a marked feature of the plan. Fire escapes will be eliminated by the use of interior fireproof stairways, so as not to mar the appearance of the buildings. A large central power station will be built with boilers and dynamos to supply light, power and heat. All service will be through private alleys in the rear of buildings. The façades and plans will show the entire scheme to be one of the largest improvements of its kind. The location is enhanced in having the park of the Convent of Sacred Heart on the north side and in overlooking St. Nicholas Park on the east. The estimated cost of the work will exceed \$1,300,000. Messrs. Rouse & Sloan, 11 East Forty-third Street, are the architects. The two houses on St. Nicholas Avenue front will be built first.

C. P. H. Gilbert, Townsend Building, 1123 Broadway, is now taking figures from general contractors for the residence which Morris Schinasi, tobacco manufacturer, 309 West 120th Street, is about to erect on

SEATS *of the* COLONISTS

PART I.—Photographs and measured drawings of Chippendale furniture, together with descriptive text. PRICE, \$5.00.

THE AMERICAN ARCHITECT, 12 WEST 40TH STREET
New York

Riverside Drive, northeast corner of 107th Street. The plot measures 60x100 feet, and this will complete the improvement of the block bounded by Riverside Drive, Broadway, 107th and 108th Streets. Mr. Schinasi purchased the site from S. G. Bayne, president of the Seaboard National Bank, in December, 1906. The new structure will be fireproof, four stories, with a high-pitched roof, of French Gothic design. The exterior will be of gray limestone on the four sides.

Hale & Rogers, 11 East Twenty-fourth Street, are taking figures on general contract for the Harkness mansion, to be built on Fifth Avenue, northeast corner Seventy-fifth Street, and to cost in the neighborhood of \$500,000. The site, which is vacant, measures 35x115 feet. For architectural style the Italian Renaissance has been chosen, made up of Indiana limestone. There will be a passenger and service elevator, marble and wrought-iron work, and elaborate interior decorations.

Plans have been filed with the Building Superintendent for a six-story apartment-house to be built for Jacob Axelrod at the corner of Morningside Drive and 118th Street. It will front 100.11 feet on Riverside Drive and 105 feet in 118th Street, with façades of brick trimmed with stone. It is to cost \$160,000. G. F. Pelham, 503 Fifth Avenue, is architect.

Cleverdon & Putzel, 41 Union Square, are preparing plans for a six-story thirty-family flat, for Samuel Platt, 535 East 161st Street, to be situated on the north side of 161st Street west of Park Avenue, Bronx. Cost, \$50,000.

A six-story high-class apartment-house, for 55 families, to cost about \$150,000, will be erected on Riverside Drive and 135th Street. Hensle Construction Company, 302 West 120th Street, owners, and Bernstein & Bernstein, 24 East Twenty-third Street, are making plans.

Burlington Realty and Construction Company, 511 West 134th Street, will soon begin the erection of two six-story high-class apartment-houses, 75x86.11 feet, on the north side of 138th Street, and south side of 139th Street, 100 feet west of Broadway, twenty-five families each; total cost, \$180,000. Schwartz & Gross, 35 West Twenty-first Street, are now making plans.

OMAHA, NEB.—John D. Creighton will build a seven or eight-story hotel, 88x240, on Thirteenth Street, at a cost of \$300,000.

Architects Fisher & Lawrie, 212 Paxton Building, have prepared plans for a five-

story building at Sixteenth and Harney Streets, for J. A. Swanson. Estimated cost, \$125,000.

John Latenser, architect, will prepare plans for the new building for Clarkson Memorial Hospital, to be erected at Twenty-second and Howard Streets. Cost, \$75,000.

ORANGEBURG, S. C.—D. G. Zeigler, Columbia, S. C., is preparing plans for a Town Hall, opera house, stores and market house, to be erected by Wm. C. Wolf. Estimated cost, \$100,000. Reinforced-concrete; three stories; tile floors; common roofing; steam heat; interior to have marble finish.

ORANGE MOUNTAIN, N. J.—The Essex Inn Company has been incorporated to build and operate a large hotel on the Orange Mountain, West Orange. It will cost \$100,000.

PAXTON, ILL.—The Lutherans, it is stated, contemplate erecting a brick and stone edifice, costing about \$25,000.

PENSACOLA, FLA.—The erection of a hospital to cost, including equipment, \$75,000, is reported agitated.

PEORIA, ILL.—The Directors of the Bradley Polytechnic Institute are reported to be preparing to erect a gymnasium, at a cost of \$100,000.

PHILADELPHIA, PA.—The Trades League is said to be agitating the erection of a convention hall at Twenty-third and Market Streets, at a cost of \$1,000,000.

Rothschild & Zantlinger, 251 South Fourth Street, will prepare plans for the \$50,000 F. F. Teller Memorial Talmudic School at Broad and Jefferson Streets. Building will be 25x80 feet, of fireproof construction.

It is reported that estimates are being received for a seven-story manufacturing building which is to be erected at Twelfth and Callowhill Streets for the Wolf Building Company, according to plans prepared by Stearns & Castor, Stephen Girard Building. The building is to be of brick or reinforced-concrete and terra-cotta and is to cost about \$100,000.

PINE BLUFF, ARK.—Sealed proposals will be received, until May 20, by Directors of School District of Pine Bluff for erection of brick high school building. Drawings and specifications can be seen after May 1 at office of Pine Bluff Trust Company, Pine Bluff, or at office of George R. Mann, architect, Little Rock, Ark. All proposals

must be accompanied with certified check of \$500; usual rights reserved. S. M. Taylor is president and M. Hanf secretary Board of Directors.

PITTSBURG, PA.—J. Carlton Strong, it is stated, has prepared plans for an addition to the Liberty National Bank that is to cost \$80,000.

F. J. Osterling, architect, Commonwealth Building, Pittsburg, has prepared plans for a seventeen-story bank and office-building for the East End Savings and Trust Company, Penn Street and Sheridan Avenue, Pittsburg. Cost, \$400,000. Paul C. Dunlevy is treasurer.

Architect Carlton Strong, New York City, has plans for an addition to the building of the Liberty National Bank, Penn and Sheridan Avenues. Cost, \$80,000.

Architect J. Carlton Strong, New York (Pittsburg office, Bellefield Dwellings), is preparing plans for six-story brick and stone addition for the Liberty National Bank, Penn and Sheridan Avenues, East End. Addition will be built on rear of the bank lot, 60x31 feet. Cost, \$60,000. v

Architects Bilquist & Lee, Lewis Block, Pittsburg, are drawing plans for garage for the Standard Automobile Company, to be erected at Aitken Avenue and P. R. R., East End. Cost, \$60,000. v

The A. & S. Wilson Company, Pittsburg, was awarded contract for erection of eight-story brick office-building for Albert Curry, to be built at Fourth Avenue and Ross Street. Cost, \$120,000. Building will contain 77 offices, and first floor will be fitted up for storerooms. Building will be a fireproof structure of the wall-bearing type, with two high-speed elevators. v

The Mesta Machine Company, Lewis Block, Pittsburg, will erect additions and enlarge its plant at West Homestead, at a cost of \$250,000. New foundry will be built, and the present foundry and machine-shop will be made into a large machine-shop. New pattern and carpenter-shops will be erected and the office-building enlarged. v

Architect Thomas Hannah, Jr., Diamond Bank Building, has been commissioned to prepare plans for new church for the Eleventh United Presbyterian congregation, Eleventh Ward, Allegheny, Rev. Chas. Wishart, Termon Avenue, Allegheny, pastor. Structure will be erected at Davis and California Avenues, Allegheny. Cost, \$35,000. v

PORTLAND, ORE.—Lamson & Holbrook are stated to have secured a permit to erect a

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 223 Illustrations 15 Color Plates

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* on 1906 issue

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

NEW ADDRESS:

110-114 WEST 32d STREET

Studio Offices TO LET

Consisting of Main Floor and Mezzanine Gallery; occupying over One Thousand Feet of Floor Space; perfectly lighted by windows, large studio light and skylight; most desirable location, near Fifth Avenue, New York; specially suited for Architects' use. For particulars address

14A, care

AMERICAN ARCHITECT

12 West 40th Street, New York



BRONZE START, NEWEL

Main Stairs, Union National Bank Building
Pittsburg, Pa.

MACCLURE & SPAHR, Architects

The Winslow Bros. Company

Ornamental Iron and Bronze

CHICAGO

NEW YORK

Strathmore

Drawing Papers and Boards

To secure best results from your efforts and complete satisfaction in working use STRATHMORE

STRATHMORE is carried in 21 distinct items and is guaranteed to be perfect for Pen, Pencil, Brush, Charcoal and Crayon. The variety of kinds and textures, surfaces, sizes and weights permits of a choice to meet personal taste or requirements of conditions.

Most dealers carry STRATHMORE. If yours does not, send 25c for two sheets of any kind, or 3 yds. of Detail paper and complete sample book. The book for the asking.

Mittineague Paper Company

Mittineague, Massachusetts, U. S. A.
"STRATHMORE QUALITY" Papers

MANUFACTURERS and

Business Firms are requested to send us copies of all Catalogues as soon as issued. These will be mentioned in the columns devoted to such information and then placed in our permanent file.

Please address

CATALOGUE FILE DEPT.,
THE
AMERICAN ARCHITECT,
12 WEST 40TH STREET,
NEW YORK.

six-story brick hotel on Eleventh and Washington Streets, to cost \$140,000.

PRINCE ALBERT, SASK., CAN.—The School Board is having plans prepared for a \$100,000 collegiate institute.

PUEBLO, COL.—The County Commissioners are reported to have decided to erect a Court-house, costing about \$400,000.

PULLMAN, WASH.—The Board of Regents of the Washington State College and the State Board of Control, it is reported, have provided for the erection of additional buildings and improvements to be made at the college, at a total cost of \$322,000.

REGINA, SASK., CAN.—The Provincial Government will build Court-houses at Battleford, Saskatoon and Moosejaw this year. F. J. Robinson is Commissioner of Works, Regina.

ROANOKE, VA.—J. T. Strickland will erect a seven-story business building here, it is reported, at a cost of \$150,000.

ST. LOUIS, MO.—Plans have been completed for the new Central Presbyterian church, at Delmar and Clara Avenues. Cost, \$150,000.

Barnett, Haynes & Barnett, architects, Frisco Building, have let general contract to P. J. Moynahan, 1918 Olive Street, for constructing a three-story brick and stone temple, 100x155 feet, to be erected at Kings-highway and Washington Boulevard, for the Temple of Israel, Leon Harrison, pastor, 4131 Maryland Avenue. Cost, \$150,000.

Plans are being prepared for the new St. Frances de Sale's church, in the southwestern part of the city. Cost, \$150,000.

Board of Public Improvements has had plans prepared by Milliken & Wray for additions to the Insane Asylum, to cost about \$800,000.

It is said that plans are being prepared for the new Pilgrim Congregational church, at Union Avenue and Morgan Street. Cost, \$225,000.

ST. PAUL, MINN.—Thori, Alban & Fisher, architects, have submitted sketches for a proposed fireproof hotel building to be erected on Ninth and St. Peter Streets. The ground plan is 50x75. Cost, \$150,000.

The House and Senate are stated to have passed a bill authorizing the issue of \$100,000 bonds for a police station in St. Paul.

The State Board of Control have instructed Clarence H. Johnston, architect, to push work on plans for the following buildings: The engineering building at the State University, \$250,000; new prison at Stillwater, \$100,000; dormitory and dining hall, Crookston branch school of agriculture, \$50,000; model school building, Moorhead normal, \$50,000; cottage for men, Hastings asylum, \$50,000; nurses' dormitory, Rochester hospital, \$55,000; tubercular or detention hospital, St. Peter hospital, \$65,000; custodian building, Faribault school for feeble-minded, \$50,000.

SAN ANTONIO, TEX.—The Legislature, it is reported, has appropriated \$75,000 for an annex to the Western Insane Asylum.

SAN FRANCISCO, CAL.—Reports state that

a steel-frame, seven-story building of brick and terra-cotta construction is to be erected on the north line of Market Street, between Mason and Taylor Streets, for Louis Metzger and Louis Shoenberg, to cost \$125,000. The building will consist of basement and first and second stories for business purposes. The upper five stories will contain 75 rooms, which will be let as a hotel. The lot extends through to Turk Street and is the site of the old Unique Theatre. Sylvain Schnaitscher, 1706 Fillmore Street, is architect. It is proposed to complete the structure by January 1, 1908.

Ellen A. Fife has applied for a permit to erect an eight-story Class A office building at the junction of California, Market and Drumm Streets, at a cost of \$175,000.

The Mechanics' Savings Bank, 143 Montgomery Street, will erect a building at the corner of Market and Mason Streets. It will be an eight-story Class A building, costing \$200,000. The bank and two stores will be located on the first floor. In the basement will be located marble safe deposit vaults of modern type, with the latest security devices. The upper stories will be devoted to offices. The upper front will be constructed of pressed brick and terra-cotta in light colors. Excavation for the building is under way by Lindgren, Hicks Co., Fairmont Hotel. L. B. Dutton, Chronicle Building, is architect.

The Behlow estate is preparing to erect a building on Geary Street, between Stockton and Powell Streets, which will cost \$150,000. The dimensions of the lot are 87.6 x 137.6. The building consists of base-

— WATER —

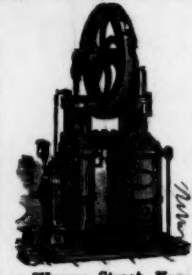
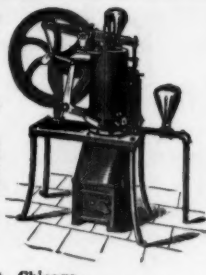
**Rider & Ericsson
Hot-Air Pumping Engines**

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.

RENAISSANCE DOORWAYS

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

Price, \$7.50

THE AMERICAN ARCHITECT, 12 West 40th St., NEW YORK

EGSOLTMANN
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 44x11 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—

ment and two upper floors, for salesrooms and offices. Emil John is architect.

The Board of Education, it is stated, has accepted plans for the polytechnic High School, which is to be erected on Frederick Street, at a cost of \$375,000.

A seven-story hotel building will be erected soon on corner of Jones and O'Farrell Streets by John Proctor. The building will contain 250 rooms, 80 of which will have baths. There will be two high-speed elevators. The halls are to be wainscoted with marble. The front will be of pressed brick in two shades, trimmed with terracotta. Thomas J. Welsh, 40 Haight Street, and John W. Carey are architects.

SEATTLE, WASH.—Graham & Myers, architects, Lowman Building, are preparing plans for the ten-story office building to be erected by C. J. Smith and associates on the double corner of Third Avenue and Stewart Street this summer at a cost of \$300,000. Excavation for the foundation is now under way, and Mr. Smith announces that he will commence the actual construction at once.

Westminster Presbyterian congregation contemplates the erection of a church to cost \$50,000.

Plans are being prepared for a building for the Y. W. C. A., west of Sixth Avenue, to cost about \$300,000.

SEWANEE, TENN.—Andrew Carnegie is stated to have given to the University of the South \$60,000, with which it is proposed erecting a science hall.

SEWARD, NEB.—A court-house in Seward county, to cost \$85,000, will be erected by the city. Address County Clerk.

SHELBYVILLE, IND.—Chas. Major, it is stated, will erect a \$50,000 theatre here.

SHOSHONE, WYO.—Bids are asked by the Commissioner of Indian Affairs, Washington, D. C., until 2 P.M., May 28, for fur-

nishing materials and labor to construct and complete at the Shoshone School one brick dormitory and one brick school-house.

SLEEPY EYE, MINN.—The citizens are contemplating to erect a lodge and opera-house building to cost about \$15,000.

SPARTANBURG, S. C.—Plans are being prepared for a hotel to be erected by J. T. Harris at Rock Cliff Lithia Springs, near here. Cost, \$100,000.

SPOKANE, WASH.—The Puget Sound Realty Association, of Seattle, are said to be planning the erection of a twelve-story fireproof office building in Spokane, to cost \$375,000.

SPRINGFIELD, MASS.—The plans of Edw. L. Tilton, of New York, N. Y., submitted in competition for the library, it is stated, have been accepted. The plans provide for a stone building 220x85 feet, and estimated to cost \$290,000. Andrew Carnegie has increased his gift from \$150,000 to \$175,000.

SUPERIOR, WIS.—The School Board is reported to have directed plans to be prepared for a high school, estimated to cost \$200,000.

SYRACUSE, N. Y.—A. L. Brockway, architect, Syracuse Savings Bank Building, has completed plans and will let contracts within thirty days for the Yates Hotel annex and remodeling the present hotel. The annex will have 200 rooms and will be strictly fireproof. The present hotel will be made into a fireproof structure. Between \$300,000 and \$400,000 will be spent.

TRENTON, N. J.—Reports state that in honor of his father, the late Wm. G. Cook, of this city, Hampton W. Cook will build a Y. M. C. A. building as a memorial, to cost \$150,000. There will be \$400,000 set aside for an endowment.

TUSCALOOSA, LA.—Plans for the new buildings to be erected on the University Campus are being considered by the committee on buildings and grounds appointed by the board of trustees of the State University. Appropriation, \$500,000.

WASHINGTON, D. C.—Bids are asked by James Knox Taylor, Supervising Architect, Treasury Department, until 3 P.M., May 27, for the construction, including plumbing, heating apparatus, electric work and lift, of an extension to the U. S. Custom House in Washington.

WASHINGTON, PA.—Architects McCollum & Dowler, Bank for Savings Building, Pittsburgh, Pa., have plans for a store and office building for the Union Block Company here. Cost, \$50,000.

WATERLOO, IA.—Clinton F. Shockley is reported to have been engaged as architect to be associated with C. A. Shlack of New York City as consulting architect for the hospital which is to be erected by the Roman Catholics.

WEST POINT, GA.—West Point is soon to have two new hotels. One is being built near the river, where the Lord House was recently burned, and will be run by Judge and Mrs. W. R. Lord. The other will be under the management of the Buckley Brothers, proprietors of the White House, and will stand on the corner opposite the post-office.

WHITE BEAR, MINN.—Notice is hereby given that the Board of Directors of the Young Men's Christian Association, of White Bear, Minn., will, up to the hour of 8 o'clock P.M., May 20, receive sealed proposals for erecting a Y. M. C. A. building in the Village of White Bear, Ramsey County, Minnesota. Plans and specifications can be seen at the office of the Recording Secretary at White Bear, Minn.



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

"THE ABSOLUTELY SAFE"

45 BROADWAY, NEW YORK

GERMAN

Classified Index to Advertisements

(FOR ALPHABETICAL LIST SEE PAGE 42)

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