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ARCHITECTURE

ENGINEERING

DECORATION

CONSTRUCTION

238 TREMONT ST.

BOSTON MASS.

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The American Architect and Building News

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Chicago.
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MARYLAND.

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MASSACHUSETTS.

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American Mason Safety Tread Co..... *Stair Tread*
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Morrill & Whiton Construction Co.... *Masons and Builders*
Morss & Whyte....*Wire & Metal Works*
Moss, Chas. E.....*Blue Prints*
New England Tank and Tower Co...*Tanks*
Robey-French Co..*Photographic Supplies*
Rutan, Wm. L.....*Building Contractor*
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MASSACHUSETTS.

Boston.
Modelling and Ornamental Plaster
Spaulding Print Paper Co....*Blue Prints*
Standard Fire-escape & Mfg. Co..... *Fire-escapes*
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Palmer.
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Worcester.
Algonquin Red Slate Co.....*Paint*

MISSOURI.

St Louis.
Washington University School of Engineering and Architecture.....*School*

NEW JERSEY.

Jersey City.
Dixon Crucible Co., Jos.....*Graphite*

Paterson.
Passaic Steel Co.....*Structural Iron*

Tenafly.
Richter Mfg. Co.....*Tapestrolea*

NEW YORK.

Irvington-on-Hudson.
Lord & Burnham Co.....*Conservatories*

Ithaca.
Cornell University..*Architectural School*

Jamestown.
Art Metal Construction Co..... *Metal Furniture*

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Mount Vernon.
Hartmann Bros. Mfg. Co...*Staved Columns*

N. Y. City.
American Tin Plate Co.....*Roofing Tin*
Associated Expanded Metal Co..... *Expanded Metal*
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Barrett Mfg. Co.....*Waterproofing*
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Frink, I. P.....*Reflectors*
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NEW YORK.

N. Y. City.
Hayes, George.....*Metallic Lathing*
Hecla Iron Works..... *Ornamental Iron and Bronze*
Jackson & Co., Wm. H.....*Grates*
Jenkins Bros.....*Valves*
Jones, T. W.....*Vanes*
Mott Iron Works, The.....*Iron Work*
Neuchatel Asphalt Co.....*Asphalt*
New Jersey Zinc Co.....*Zinc White*
New York Belting and Packing Co., Ltd. *Interlocking Rubber Tiling*
N. Y. Metal Ceiling Co...*Metal Ceilings*
Okonite Co., Ltd.....*Insulated Wire*
Pitt, W. R.....*Folding-Gates*
Rider-Ericsson Engine Co..... *Hot-Air Engines*
Sargent & Co.....*Builders' Hardware*
Smith Co., H. B.....*Steam Heat*
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Society of Beaux-Arts Architects..*School*
The Robert C. Fisher Company..*Marble*
Truss Metal Lath Co.....*Metal Lathing*
U. S. Mineral Wool Co....*Mineral Wool*
Warren Chemical & Mfg. Co..... *Asphalt Roofing*
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Yale & Towne.....*Hardware (Art)*

Rochester.
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Troy.
Globe Ventilator Co.....*Ventilators*
Troy Laundry Machinery Co..... *Washing-Machines*

OHIO.

Canton.
Berger Mfg. Co., The.....*Metal Ceilings*

Cleveland.
Cudell, F. E.....*Traps*

Columbus.
Kinnear Mfg. Co., The..... *Steel Rolling Doors*
Ohio State University..*Architectural School*

PENNSYLVANIA.

Ambler.
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Newman, Geo. A.....*Perspectives*
Taylor Co., N. & G.....*Roofing Tin*
Thorn, J. S.....*Sheet Metal*
University of Pennsylvania.....*School*

Pittsburgh.
National Fireproofing Co....*Fireproofing*
Standard Sanitary Mfg. Co..... *Porcelain Enamelled Ware*

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See last or next issue for the following advertisements: —

Chicago & Alton Railway.
David Craig
Cudell, F. E.
Charles J. Jager Co.
Keasbey & Mattison Co.
Morse, Williams & Co.
Standard Sanitary Mfg. Co.
Thorn Co., J. S.

ADDRESSES WANTED.

We shall be obliged to anyone who can provide us with the present addresses of any of the subjoined parties.

American Architect Co.,
238 Tremont St., Boston.

Barlow, W. F., lately of Bar Harbor, Me.

Beeson, E. W., Jeffersonville, Ind.

Benkirt, G. F., lately of 302 East Grace St., Richmond, Va.

Carpenter, R. W. E., lately of Pittsburgh, Pa.

Colbert, H. W., lately of Woodbury, Ga.

Cupperwell, E. W., lately of Union Stock Yards, Chicago, Ill.

Dans, F. L., lately of Ithaca, N. Y.

Hayes, Jas. T., lately of Syracuse, N. Y.

Knox, Pierce & Duryea, lately of Worcester, Mass.

Locke, S. E., lately of Los Angeles, Cal.

McCarthy, P. A., lately of Indianapolis, Ind.

Martling, J. H., lately of Kansas City, Mo.

Maydwell & McClintock, lately of 22 Sheldon Block, El Paso, Tex.

Novek, Bernard, lately of 914 Lumber Exchange, Minneapolis, Minn.

O'Brien, James, lately of Bridgeport, Conn.

Rice, Joe, lately of Beaumont, Tex.

Shaffer, Matthew, lately of Johnstown, Pa.

Stone, Edwin J., lately of Worcester, Mass.

Webster, W. H., lately of "The Naseby," Toledo, O.

Wilcox, F. O., lately of 614 Commercial St., New Orleans, La.

Wolf, James, lately of 125 Broadway, New York, N. Y.

ARCHITECTS' REMOVALS, Etc.

ANNOUNCEMENT.—George A. Ross and David H. MacFarlane announce that they have formed a partnership for the general practice of architecture under the firm name of Ross & MacFarlane, Room 51, Bank of Ottawa Building, St. James Street, Montreal. Telephone Main 227. They will be pleased to receive samples and catalogues. 1509

WANTED.

DRAUGHTSMEN.—I need two draughtsmen, one must be first-class at preliminary work and rendering and the other good at working drawings. R. H. Hunt, Chattanooga, Tenn. 1507

WANTED.

SITUATION.—Position wanted by a practical draughtsman of sixteen years' experience who is not afraid of work. Address "*Scotia*," this office. 1506

WANTED.

PARTNERSHIP OPENING.—A reliable St. Louis architect with a good practice wishes to correspond with a first-class draughtsman and designer, with the object of forming a partnership. Address "*A. B.*" care *American Architect*. 1509

BUILDING INTELLIGENCE.

(Reported for the American Architect and Building News.)

(Although a large portion of the building intelligence is provided by their regular correspondents, the editors greatly desire to receive voluntary information, especially from the smaller and outlying towns.)

ADVANCE RUMORS.

ALBINA, ORE.—The Oregon Railroad and Navigation Company contemplate erecting several buildings at their shops at Albina: a machine shop, to cost $95,000; a 22-stall addition to the round-house, cost $56,000; paint shop, cost $45,000; transfer tables, cost $26,000; coal chutes, cost $5,000; storehouse, cost $5,000.

ATHENS, GA.—Bids will be received by the Supervising Architect, Washington, D. C., until Nov. 17, for installing heating apparatus in the Post-office and Court-house here, as advertised in THE AMERICAN ARCHITECT.

BALTIMORE, MD.—An appropriation of $96,500 has been made for the erection of two new engine houses next year.

CHICAGO, ILL.—Dr. Triggs has announced in his address before the Architectural Club that the first steps toward the foundation of a People's Industrial College will be

BUILDING INTELLIGENCE.

(*Advance Rumors Continued.*)

taken in the spring, when a farm of thirty acres near Chicago will be purchased and buildings erected.

The new Michael Reese Hospital will be six-story, fireproof, costing in the neighborhood of $400,000. Richard E. Schmidt, 172 Washington St., was the successful architect in the competition. The new building is to be erected on the site of the present one, at 29th St. and Groveland Ave.

CINCINNATI, O.—J. G. Steinkamp & Bros., Traction Building, are designing a flat building for Thos. Emery's Sons, to be erected on Middleton Ave. The building will be of brick, three stories high and will have asphalt roof; all modern conveniences. Cost, about $30,000.

Rev. D. O'Meara, pastor of St. Andrew's Church, on Mound St., has purchased property in Avondale, with the view of erecting

BUILDING INTELLIGENCE.

(*Advance Rumors Continued.*)

thereon a new $60,000 church. A parochial school will also be built.

COCKENOE ISLAND HARBOR, CONN.—Bids will be received at the office of the Light-house Engineer, Tompkinsville, N. Y., until Dec. 1st, for the erection of Pecks Ledge Light-house, also, separate bids for the Metal Work, as advertised in the *American Architect*.

COLUMBUS, O.—The Ohio State University trustees have awarded the contract for Chemical Hall to Nichol & Carr, of Columbus, for $73,040.

Stribling & Lum have recently drawn plans for a six-story business block, to be built for W. W. Franklin, on North Third St. Mr. Franklin has purchased land on Lazelle St., also, and intends erecting another business building, six stories, brick,

BUILDING INTELLIGENCE.

(*Advance Rumors Continued.*)

as soon as plans can be made and contracts let.

FALL RIVER, MASS.—Plans are reported to be in preparation for a three-story marble rectory, to cost $60,000, and a 2½-story brick hospital to cost $200,000, both to be erected by St. Ann's parish. Contracts, it is said, will be let about Dec. 1.

FORT SCREVEN, GA.—Bids will be received at the Mechanics' National Bank Building, Savannah, until Nov. 21, for constructing, plumbing, heating and electric wiring, lavatory, at this place. J. T. Davidson, Q. M.

FRANKFORT, KY.—Plans for the new capitol at Frankfort have been completed by Frank M. Andrews, and a meeting of the State Capitol Commission will be held Nov. 10, when the plans will be examined, and if satisfactory, approved and arrangements made for advertising for proposals and letting the contracts for the actual work of construction. The new capitol is to be erected on the site of the present building.

GREAT BARRINGTON, MASS.—The Berkshire Pressed Brick Company, just organized, with a capital of $150,000, has purchased property on the West Sheffield road and will erect a $50,000 plant for the manufacture of brick under the Herennekes system.

HARTFORD, CONN.—A two-story brick and stone edifice, 65x130 feet, is to be erected for St. Bernard's Society. The plans, prepared by J. A. Jackson, 1173 Broadway, New York City, specify slate roof, steam heat, electric light, hardwood finish, etc. Cost, $45,000.

JACKSON, MISS.—The contract for the erection of the Merchants' Bank Building, to be erected on the corner of Capital and State Sts., has been let to F. J. McGraw for $46,844. The building is to be six stories high, the first story to be built of white stone and the remaining five stories of gray pressed brick, with terra-cotta trimmings. The first floor of the building will be occupied by the Merchants' Bank and the remainder devoted to offices.

LOUISVILLE, KY.—The plans prepared by Brinton B. Davis, of Paducah, have been accepted for the county armory, which will cost $325,000. It is reported that the contract for erection will be let after Jan. 1, 1905.

MALDEN, MASS.—Col. Harry E. Converse is to erect a $300,000 block at the corner of Pleasant and Washington Sts.

MERIDIAN, MISS.—At a recent meeting of the Railroad officials forming the Meridian Terminal Company, arrangements were made for the building of a union passenger depot and the issuance of bonds to raise the money therefor. It was decided to build a structure to cost $150,000, exclusive of the cost of the land. Plans were approved and work of construction will begin soon.

MILWAUKEE, WIS.—Architects are submitting plans and bids will be opened about Jan. 1, for a $40,000 edifice, to be erected by the St. Jacobi Lutheran Society, on Eighth Ave., between Forest Home Ave. and Mitchell St. The building will be of brick and stone, with large steeple and bell tower. The skeleton will be of structural iron-work.

NASHUA, N. H.—The accepted design for the new postoffice building was drawn by F. Manton Wakefield, of Boston. The building will be erected at Park, Court and Olive Sts., and the cost, for land, building and equipment, will be $90,000. The specifications call for a building either of sandstone or limestone, with granite basement, the construction to be fireproof throughout, with steel and concrete floors, roofs, etc.

NEW YORK, N. Y.—It is stated that a large lace factory, employing 1,000 hands, is to be erected in Brooklyn, on the plot bounded by Lincoln Ave., Ridgewood Ave., Nichols Ave. and Fulton St.

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

It is reported that an 18-story office building will be erected by the Gorham Manufacturing Company, silversmiths, at 15, 17 and 19 Maiden Lane, and 18, 20 and 22 John St., at the expiration of present leases on May 1, 1905. At present the plot is occupied by old four and five-story buildings.

John T. Brady & Co., 4 and 6 East 42d St., have secured the general contract to build a public bath, 163.6x140.9 feet, on Avenue A, between 23d and 24th Sts. Plans by William M. Aiken and Arnold W. Brunner, 33 Union Sq. The structure will be perfectly equipped and cost about $250,000.

The general contract to build a $100,000 factory 120x200 feet, on Sheffield Ave., Brooklyn, has been awarded A. Kleinert, 16 Court St. It will be of mill construction, four stories and basement. Owners, J. Eisner & Co.; architect, S. B. Eisendrath, 41 West 24th St.

Villaume & Carlson, 1123 Broadway, are about to erect three six-story brick tenements on 168th St., near Boston Road. Tin roofs. Total cost, $115,000. Architects, Neville & Bagge, 217 West 125th St.

S. B. Haines, of Yonkers, will erect a 12-story brick and stone tenement, 100x115 feet, at Nos. 46-50 Central Park, West. Tile and slag roof. Cost, $650,000. Architect, C. W. Romeyn, 55 Broadway.

A six-story brick and stone tenement, 50x 90 feet, costing $75,000, is to be erected at Nos. 1454-56 Madison Ave., for John E. Olson, 168 West 23d St. Roof, gravel and slag. Plans by Adolph Mertin, 33 Union Sq.

Bernstein & Bernstein, 72 Trinity Place, are the architects of a five-story brick tenement-house, to be erected by Joseph Hyman, 76 East 111th St., at the corner of Washington Ave. and 167th St. Cost, $38,000.

Levinson & Gall, 370 Madison St., are about to erect a brick and stone store and tenement, six stories high, 50x62 feet, at 7th Ave. and 143d St. Architect, Geo. F. Pelham, 503 5th Ave. Cost, $55,000.

A two-story brick stable will be built by H. Metzinger, 25 Halsey St., Brooklyn, on 164th St., near Washington Ave. The architect is C. A. Milner, 148th St. and 3d Ave. Cost, $36,000.

A four-story brick academy, to cost $20,000, is to be erected for the Ursuline Convent, on 137th St., near Alexander Ave. Arthur Arctander, 520 Willis Ave., architect.

A press report states that Max Kurzrock and Louis Selesnik will erect a ten-story brick and stone loft building at No. 55 16th St. It will have tar and gravel roof and cost about $80,000. Plans by S. B. Eisendrath, 41 West 24th St.

Plans have been drawn by Snelling & Potter, 1170 Broadway, for a residence to be erected at No. 1023 5th Ave., for James A. Garland, of the American Publishing Company, 1133 Broadway. The structure will be of Harvard brick, with Indiana limestone trimmings, seven stories in height and measure 40x100 feet.

Philip Braender, 418 Central Park, West, has had plans prepared by Fred C. Browne, 143 West 125th St., for a 12-story business building, to be erected at 684 Broadway. It will be of steel-frame construction, have composition roof, elevators, steam heat, open plumbing, electric light, etc. Cost, $350,000.

The T. B. Ackerson Construction Company, 297 East 15th St., will erect eight dwelling-houses on East 12th St., near Avenue H, Brooklyn, costing $6,000 each. They will be two-story and attic, of frame construction, with shingle roofs and furnace heat. A. W. Pierce, 1127 Flatbush Ave., architect.

Plans by Architect C. W. Romeyn have been filed for a new 12-story apartment-house, to be ereceed for Samuel B. Haines, of Yonkers, at the southwest corner of Central Park West and 65th St. It will be called the "St. Lawrence." Cost, $650,000.

NORFOLK, VA.—Bids will be received until Nov. 22 by the Bureau of Supplies and Accounts, Navy Department, Washington, for the construction of two sets of officers' quarters at the United States Naval Hospital, at Norfolk. Drawings can be obtained upon application to the architects, Wood, Donn & Deming, 808 17th St., Washington. H. T. B. Harris, paymaster-general, U. S. N., Washington.

NORRISTOWN, PA.—Bids are wanted on the 15th day of December, by the Supervising Architect, Washington, D. C., for the construction of a post-office at this place, as advertised in the *American Architect.*

PITTSBURGH, PA.—Messrs. Palmer & Hornbostel, of New York City, have been appointed architects of the Carnegie Technical Schools, receiving the prize of the competition. Second place was secured by G. B. Post, of New York, and third, fourth and fifth rank with an award of $1,000, went to Wood, Donn & Deming, and Corbett & Pell, Washington, D. C., and New York (associated); Gram, Goodhue & Ferguson, Boston and New York, and Newman & Harris, Philadelphia. The schools will represent, when completed, an outlay of $5,000,000. Work will begin as soon as workinb plans can be made.

PORTLAND, ORE.—The Young Women's Christian Association is considering the erection of a new building, to cost, with site, $100,000.

PROVIDENCE, R. I.—Bids will be received until Dec. 12, by the Supervising Architect, Washington, D. C., for construction of the United States Post-office, Court-house and Custom-house, at Providence, as advertised in the *American Architect.*

PULLMAN, WASH.—It is stated that the State Agricultural College will ask an appropriation of $55,000 for a new college hall and an addition to the mechanical building.

SANTA CLARA, CAL.—A committee of graduates and friends of Santa Clara College will raise $1,000,000 for the erection of buildings on the new college site at Mountain View. The construction of the new edifices will begin as soon as $250,000 has been subscribed. Already several large donations have been made.

SEATTLE, WASH.—The St. Paul Foundry Company has been awarded the contract for steel work on the new depot to be erected by the Great Northern and the Northern Pacific Railroads. Deeks & Deeks, of St. Paul, have the contract for superstructure, to cost $500,000.

VICTORIA, B. C.—Bids will be received by George H. Webster, Division Engineer, Vancouver, for the erection of a brick and stone hotel, at Victoria, until Dec. 29, as advertised in the *American Architect.*

WASHINGTON, D. C.—Bids will be received at the office of the Building Committee, Washington, D. C., until Nov. 10, for construction of two laboratory buildings for the United States Department of Agriculture, as advertised in the *American Architect.*

WANTED.

SITUATION.—Position wanted as Superintendent, Draughtsman, Specification Writer or Estimator in Architects' or Builders' office. Have had long practical experience in all classes of work and can give best of references. Address "Gen. Supt.," this office. 1506

PROPOSALS.

Treasury Department, Office of the Supervising Architect, Washington, D. C., October 31, 1904. Sealed proposals will be received at this office until 3 o'clock P. M. on the 15th day of December, 1904, and then opened, for the construction complete of the U. S Post-office at Norristown, Pa., in accordance with drawings and specifications, copies of which may be had at this office, or at the office of the Postmaster at Norristown, Pa., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1507

PROPOSALS.

HOTEL.

[At Victoria, B C.]

Tenders are invited by the Canadian Pacific Rail way Co. for the erection of a seven-story stone and brick hotel at Victoria, B. C. Plans and specifications may be seen at the offices of the Chief Engineer of the Company at Montreal and at Vancouver, also at the offices of F. M. Rattenbury, architect, Victoria, B. C. Tenders must be accompanied by a marked cheque equal to five per cent, of the amount of tender; this cheque to be forfeited in case any contractor fails to enter into a contract, and furnish bonds in accordance with the plans and specifications, if called upon to do so; but will be returned to all contractors as soon as the contract is signed. Tenders to be made out in duplicate upon the printed forms provided by the Company and addressed **on or before December 29** to George H. Webster, Division Engineer, Vancouver. The Company reserves the right to reject any or all of the tenders. 1597

Sealed proposals will be received at the office of the Light-House Engineer, Tompkinsville, N. Y., until 12 o'clock M., Thursday, December 1, 1904, and then opened, for furnishing the materials and labor of all kinds necessary for the erection and delivery of the Pecks Ledge Light-House, Cockenoe Island Harbor, Conn., in accordance with specifications, copies of which, with blank proposals and other information, may be had upon application to Lieut.-Col. William T. Rossell, Corps of Engineers, U. S A., Engineer. 1507

Sealed proposals will be received at the office of the Light-House Engineer, Tompkinsville, N. Y., until 12 o'clock M., Thursday, December 1, 1904, and then opened, for furnishing the materials and labor of all kinds necessary for the completion and delivery of the metal work of the Pecks Ledge Light-House, Cockenoe Island Harbor, Conn., in accordance with specifications, copies of which, with blank proposals and other information, may be had upon application to Lieut. Col William T. Rossell, Corps of Engineers, U. S. A., Engineer. 1507

Treasury Department, Office of the Supervising Architect, Washington, D. C., October 31, 1904. Sealed proposals will be received at this office until 3 o'clock P. M., on the 14th day of December, 1904, and then opened, for the construction complete of the U. S Post-office, Court-house and Custom-house, at Biloxi, Miss., in accordance with drawings and specification, copies of which may be had at this office or at the office of the Postmaster at Biloxi, Miss , at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1507

Treasury Department, Office of the Supervising Architect, Washington, D. C., October 20, 1904. Sealed proposals will be received at this office until 3 o'clock P. M. on the 17th day of November, 1904, and then opened, for the low pressure steam heating apparatus, complete in place, for the U. S. Post-office and Court-house at Athens, Georgia, in accordance with drawings and specification, copies of which may be obtained at this office, or at the office of the Superintendent at Athens, Georgia, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1506

Department of Agriculture, Office of the Building Committee, Washington, D. C., September 19, 1904 Sealed proposals will be received at this office until 2 o'clock P. M. on the 10th day of November, 1904 and then opened, for the general construction (except heating apparatus, elevators, electric wiring and conduit systems) of two laboratory buildings for the U. S. Department of Agriculture, Washington, D. C., in strict accordance with the drawings and specifications by Rankin, Kellogg & Crane, Architects, 1012 Walnut St., Philadelphia, Pa., copies of which may be had upon application to the Supervising Engineer, Capt. John Stephen Sewell, Corps of Engineers, U. S. Army, at the Department of Agriculture, Washington, D. C. One set only of drawings and specifications will be sent to any one bidder, but additional sets may be purchased of the printers designated by the Department, at cost of production of same. All applications must be accompanied by a certified check for $250.00, made payable to the Disbursing Clerk of the Department of Agriculture, which checks will be retained until the return of all drawings and specifications, including those which may have been purchased from printers. B. T. GALLOWAY, Chairman. 1506

Treasury Department, Office of the Supervising Architect, Washington, D. C., October 26, 1904 Sealed proposals will be received at this office until 3 o'clock P. M. on the 30th day of November, 1904, and then opened, for the construction (including plumbing, heating apparatus, electric wiring and conduits), of the U. S. Post-office at Anderson, Indiana, in accordance with the drawings and specification, copies of which may be had at this office, or at the office of the Postmaster at Anderson, Indiana, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1507

Treasury Department, Office of the Supervising Architect, Washington, D. C., October 29, 1904 Sealed proposals will be received at this office until 3 o'clock P. M. on the 12th day of December, 1904, and then opened, for the general construction of the United States Post-office, Court-house and Custom-house, Providence, Rhode Island, in accordance with the drawings and specification, copies of which may be had at the discretion of the Supervising Architect, on application at this office. Applications must be accompanied by a certified check for $250, drawn to the order of the Treasurer of the United States, which will be held at this office until the return of the drawings and specification. JAMES KNOX TAYLOR, Supervising Architect. 1507

NEW ENGLAND MATERIAL-MEN AND CONTRACTORS.

ARTISTIC WIRE & METAL WORKS.

MORSS & WHYTE,
75-81 Cornhill, Boston, Mass.

ASBESTOLITH.

SIMPSON BROS. CORPORATION,
Room 58.
166 Devonshire St., Boston, Mass.

BLUE PRINTING.

CHAS E. MOSS,
Rapid Printing Papers.
38 Broad St., Boston.

BLUE PRINTING (Continuous.)

SPAULDING PRINT PAPER CO.,
44 Federal St., Boston, Mass.

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A. A. ELSTON & CO.,
166 Devonshire St., Boston, Mass.

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SIMPSON BROS. CORPORATION,
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166 Devonshire St., Boston, Mass.

CONTRACTORS & BUILDERS.

WILLIAM L. RUTAN,
1016 Tremont Bldg., Boston.

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ERICKSON ELECTRIC EQUIPMENT CO.,
280 Devonshire St., Boston.

FIRE-ESCAPES.

STANDARD FIRE-ESCAPE & MFG CO.,
120 Milk St., Boston, Mass.

LAUNDRY DRYING MACHINERY.

CHICAGO CLOTHES DRYER WORKS,
136-138 West 24th St., New York.

LEATHER BELTING.

SHULTZ BELTING CO.,
114 High St., Boston, Mass.

MASONS AND BUILDERS.

MORRILL & WHITON CONSTRUCTION CO.,
35 Federal St., Boston, Mass.

MODELLING AND ORNAMENTAL PLASTER.

SLEEP, ELLIOT & KING CO.,
351 Cambridge St., Boston.

ORNAMENTAL PLASTERING.

HERBERT FOWLE,
43 Bristol St., Boston, Mass.

PHOTOGRAPHIC SUPPLIES

ROBEY-FRENCH CO.,
34 Bromfield St., Boston, Mass.
Cameras.

PHOTOGRAPHY.

LEON E. DADMUN,
11 Portland St., Boston, Mass.

PLASTERERS.

GALLAGHER & MUNRO CO.,
166 Devonshire St., Boston, Mass.

PORTABLE OVENS.

H. A. JOHNSON & CO.,
224 State St., Boston, Mass.

ROOFING DUCK.

C. H. PATCHELDER & CO.,
234 State St.,
Boston, Mass.

SASH CORD.

SILVER LAKE CO.,
78 Chauncy St., Boston.

SEAM-FACE GRANITE.

GILBRETH SEAM-FACE GRANITE CO.,
Park Row Building, New York.
176 Federal St., Boston.

STABLE FIXTURES.

BROAD GAUGE IRON STALL & VANE WORKS,
53 Elm St., Boston, Mass.

STONE CARVING AND MODELLING.

HUGH CAIRNS,
48A Sudbury Street, Boston.

WATERPROOF CELLARS.

FRANK B. GILBRETH,
Park Row Bldg., New York.
176 Federal St., Boston.

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CLASSIFIED ADVERTISEMENTS.

[Advertisers can be indexed only under a single head free of charge.]

ARTISTIC WIRE AND METAL WORKS.
Morss & Whyte, Boston.....

ASBESTOLITH.
Simpson Bros. Corporation, Boston..

ASPHALT.
Neuchatel Asphalt Co., New York...

ASPHALT ROOFING.
Warren Chemical & Mfg. Co., N. Y...

BATH ROOM FIXTURES.
Standard Sanitary Mfg. Co., Pittsburgh, Pa.....

BATH TUBS (Porcelain Enamelled).
Standard Sanitary Mfg. Co., Pittsburgh, Pa.....

BOOKS.
Clifford & Lawton, New York, N. Y.

BLUE PRINTS.
Moss, Chas. E., Boston.....
Spaulding Print Paper Co., Boston...

BRASS GOODS (Plumbers).
Standard Sanitary Mfg. Co., Pittsburgh, Pa.....

BRONZEWORK (Ornamental).
Richey Browne & Donald, Maspeth, L. I., New York City.....
United States Foundry and Sales Company, South Norwalk, Conn.....
Winslow Bros. Co., The, Chicago, Ill.

BUILDINGS TORN DOWN.
Elston & Co., A. A., Boston.....

CEMENT.
Atlas Cement Co., New York. .....

CLEAN-OUT.
Craig, David, Boston.....

CLOCKS.
Blodgett Clock Co., Boston.....

CLOSETS.
Standard Sanitary Mfg. Co., Pittsburgh, Pa.....

COLUMNS (Lock Joint).
Hartmann Bros. Mfg. Co., Mount Vernon, N. Y.....

CONCRETE-STEEL CONSTRUCTION.
Simpson Bros. Corporation, Boston..

CONSERVATORIES.
Lord & Burnham Co., Irvington-on-Hudson, N. Y.....

CONTRACTING.
Flynt Building & Construction Co., Palmer, Mass.....
Rutan, William L., Boston.....

CONTRACTORS AND BUILDERS.
Rutan, William L., Boston.....

CORDAGE.
Samson Cordage Works, Boston.....

CUTLER PAT. MAILING SYSTEM.
Cutler Mfg. Co., Rochester, N. Y.....

DEADENING QUILT.
Samuel Cabot, Boston, Mass.....

DOORS (Steel Rolling).
Kinnear Mfg. Co., The, Columbus, O.

DRAUGHTSMAN.
E. Eldon Deane, New York.....

DRINKING FOUNTAINS.
Standard Sanitary Mfg. Co., Pittsburgh, Pa.....

ELECTRIC APPARATUS.
Edison Light, Boston.....

ELECTRICAL CONTRACTORS.
Erickson Electric Equipment Co., Boston.....

ELECTRIC SIGNALS.
Elevator Supply & Repair Co., New York.....

ELEVATORS, ETC.
Morse, Williams & Co., Philadelphia.
Whittier Machine Co., Boston.....

ENAMELLED IRON (Plumbers Ware).
Standard Sanitary Mfg. Co., Pittsburgh, Pa.....

The American Architect and Building News

ADVERTISERS' TRADE SUPPLEMENT

No. 268 SATURDAY, NOVEMBER 5, 1904 VOLUME LXXXVI No. 1506

"STANDARD" PORTABLE SHOWER FOR HOTELS.

THE equipment of modern hotels, with every device for the comfort of the guests, makes that field practically profitable for the installation of efficient though reasonable-priced shower apparatus. Until the advent of our Portable Shower, comparatively few hotels were equipped with shower apparatus, on account of the cost of putting in permanent fixtures.

The cost of equipping a hotel containing a hundred bathrooms with permanent shower apparatus has curtailed their use except in rare cases, while now to put a "Standard" Portable Shower in each bathroom would not cost as much altogether as it would to equip but a few of the rooms with permanent fixtures.

While it would seem unreasonable on the part of the manufacturer and the plumber or architect to advocate the use of more reasonable or even low-priced fixtures, it is feasible to do so, when it is remembered that the hotel owners, as a rule, are not buying the higher-priced permanent fixtures simply because they are not up to that point.

The "Standard" Portable Shower is being used with success in the leading hotels, such as the Gibson House, Cincinnati, Ohio; the Heublein, Hartford, Conn.; St. Charles, New Orleans, and many others.

If the plumbers in their respective cities will confer with the managers of hotels, with a view to installing a sample fixture on trial, we will coöperate in an endeavor to secure for the plumber the order for the equipment of the entire hotel.

This field is not overworked, and therefore has a bright future. Correspond with our Shower Department for full information about our plan for pushing our "Standard" Portable Shower for use in hotels.

STANDARD SANITARY MFG. CO.,
PITTSBURGH, PA.

EXPANDED METAL.

NOTWITHSTANDING Expanded Metal has been a staple in the commercial list of construction materials for the last fifteen years, it is nevertheless still regarded as a unique product in the mechanical world. Although originally designed and perfected with a view to a special use as a mesh for the manufacture of fences, guards and railings, in which field it still has a considerable demand, it is at this time a very large factor in structural operations throughout the world. Curiously enough almost any mechanic upon examination of a sample of the metal to-day would say, "That's an easy thing to make," but for all that it required great skill and much patience to bring it to a point of commercial perfection. As a material, it is nothing more or less than a plain sheet of steel, which, by an automatic machine, is opened into meshes of any desired size or section of strand. The operation is accomplished, as said, by an automatic machine which receives the sheet cold, and at a single stroke the slitting and opening of the meshes are simultaneously accomplished. No material is wasted, no pieces are lost, and the elastic limit of the steel is increased. The finished sheet of Expanded Metal is from three to eight times as large as the original sheet of steel, according to the size of the meshes in the finished sheet.

The material is made to-day, for the most part, by machines which give a product in uniform length of 8 feet, the width being 12 inches to 72 inches, as occasion may require. Steel as light as 27 gauge is used with meshes only ⅜ of an inch, while for other purposes sheets are being cut from No. 3 steel with diamond meshes 5 inches by 12 inches, with many intervening sizes and weights, making possible any desired combination of mesh size and strength.

The original form in which the material was commercially produced afforded a lathing mesh, and in this form it is still being made with perfect success mechanically and with entire satisfaction to users. There is no better material made upon which to plaster than this. A more recent production in the way of a lathing mesh is called the "diamond mesh." In common practice sheets of these two materials are produced in lengths of 8 feet and in widths of 18 inches, and they constitute the standard in the specifications of all leading architects throughout the country. The typical form of mesh which has been developed for uses quite too numerous to mention includes meshes ¾ inch, 1½ inches, 2 inches, 3 inches, 4 inches and 6 inches, which meet all demands, according to their fitness for the particular case in hand.

It may be said in this connection that no material of a structural character has ever been produced which has found so wide a field of practical adaptation, as intimated above. The invention was brought about with a view of making a mesh formation of steel to answer a demand for fences, railings and kindred work. At the time of its creation there was a vast commercial demand for metallic fencing, and barbed wire, then selling at $200 per ton, making a field for a new material. During the few years following the accomplishment of Expanded Metal mechanically, manufacturers had not thought of its use as a concrete reinforcement. This came about as an adaptation, or an afterthought, in the development of a market. The multiplied uses to which the material has been put are only partly shown on the succeeding pages of this catalogue, and sufficient data we believe is herewith furnished to indicate wide possibilities in the use of a very valuable material.

Specific information can be had of any of the Associated Companies or of any of their agencies.

COMMITTEE REPORT ON "WHAT IS THE BEST PREVENTIVE OF RUST ON STREET CARS."

Presented at the Annual Convention, Master Car Builders' Association, Saratoga Springs, N. Y., June, 1904.

"YOUR committee feels that in consideration of the limited experience in the use of steel cars, and in view of the lack of definite results from experiments which have been made, and are being made, that its knowledge on this subject is not complete enough to allow of positive recommendations being made as to the best methods of treating steel cars in order to prevent the formation of rust on same. It would, however, submit to the association the following suggestions:—

First—For new cars:

(*Continued on page 3.*)

On May 9th, 1882, the N. & G. Taylor Company of Philadelphia ran the following advertisement, occupying one-fourth of a page in *The American Architect:*

ARCHITECTS

ALWAYS SPECIFY

"OLD STYLE" BRAND ROOFING TIN PLATE

WHERE FIRST-CLASS WORK IS REQUIRED

ESTABLISHED 1810.

N. & G. TAYLOR CO.

PHILADELPHIA.

MANUFACTURERS, IMPORTERS, and DEALERS, Wholesale and Retail, in every description of TIN AND LEADED ROOFING PLATES, GALVANIZED SHEET-IRON, BLACK SHEET-IRON, SHEET-COPPER, SHEET-LEAD, of any size and thickness, ROOFING TOOLS of the most improved and latest patterns. SOLDER, PAINT, NAILS, &c., &c.

Send for new Catalogue just issued and Descriptive Circulars.

This celebrated Roofing Tin has now attained a world-wide reputation. It is undoubtedly the finest plate made, its coating being what is termed "Extra Surface," or redipped, double coated with metal. Its merits and working qualities commend its favorable notice to Architects, Contractors, Roofers, &c., &c., as a Roofing Plate unequalled in quality or durability.

"OLD STYLE," Re-dipped, is the *original* way of making tin and ended plates, as first made in Philadelphia in 1810. All the other plates now made are but poor imitations in comparison with the genuine "OLD STYLE." Its surface is perfect, and bears a heavy mottled appearance. Each box contains a small tin card with our name upon it. The boxes are substantially made of good tough wood, and strongly strapped with hoop-iron, and distinctly branded on the end and side in heavy black letters, burned deeply into the wood, "OLD STYLE LEADED," Warranted.

It is the only Perfect Roofing Tin Made.

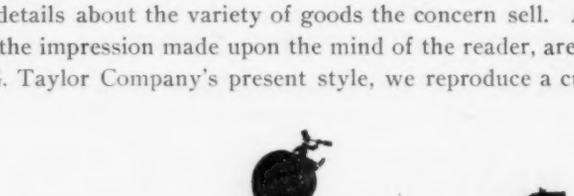
None is genuine unless it bears the name of

N. & G. TAYLOR CO.

This is the oldest advertisement in an architects' publication that the N. & G. Taylor Company used, of which they have any record. It is by no means a bad advertisement, although it belongs to a class of advertising which is plainly of another age. The advertiser of those days simply made an explicit statement of what he had to sell, with possibly a short description of the article. It was more in the nature of a sign or a catalogue.

Advertising ideas have changed since then. A house which has been in business almost a hundred years has a wide acquaintance among architects, builders and metal workers. It is not necessary now to make a catalogue, nor to go into details about the variety of goods the concern sell. A few terse, vivid, fresh sentences, which will keep up the impression made upon the mind of the reader, are the best sort of advertising.

As a sample of N. & G. Taylor Company's present style, we reproduce a current advertisement.



NOTHING we can say is stronger than the simple fact that there are fifty-year-old roofs wearing "Taylor Old Style" tin intact.

N. & G. TAYLOR COMPANY

Established 1810

Philadelphia

It is an interesting lesson in advertising to compare these two advertisements, each one good. The earlier card was actually the best for its time, just as it is felt that to-day's advertisement is the best for its time. A lesson to be derived from this view is that between this early announcement and this fresh, up-to-date advertisement, there is a continuous series of advertisements appearing in *The American Architect* every other week. Few houses have such a record in advertising, but then few houses have such a business record as have the N. & G. Taylor Company.

In this new country of ours, and in this day of many changes, new corporations and all that sort of thing, it is gratifying to realize that there are substantial old houses, whose business history is almost as old as the history of their country, and which in the same city, and in the same line, have gradually built up a business which has grown bigger and bigger by the simple yet difficult device of making the best goods that can be made, and selling them at a fair price. One of the finest things that our industrial system possesses is this same old concern, a business handed down from father to son, each one striving to add to the honorable record of his predecessor. Four generations of Taylor's have been connected with the N. & G. Taylor Company.

(*a*) The steel should be cleaned thoroughly of all rust and furnace scale before the car is assembled.

(*b*) All joints, before assembling, should be thoroughly coated with coal tar.

(*c*) After car is assembled, all grease should be thoroughly removed from the steel and same given a good coat of carbon or graphite paint on the outside and underneath, and the inside a heavy coat of crude petroleum, coal tar applied hot, or some similar substance.

(*d*) The outside to be given a second coat of graphite or carbon paint, as may be desired.

Second—For old cars:

(*a*) All the scale should be removed wherever it appears on the car by steel brushes and scrapers, and in the case of the inside of the car, by any of the above methods or by the use of pneumatic hammers or mauls.

(*b*) After all scale and rust have been removed the car should be thoroughly cleaned with steel scrapers or wire brushes and blown out with air, in order to present a clean surface for the paint.

(*c*) The methods for paint recommended for new cars should be followed out in the case of old cars, after a clean surface is obtained.

Third—As some of the most prolific causes of deterioration of steel cars are the loading of same with hot billets, and use of mauls, bars, etc., on the outside to assist in the unloading of cars, and the allowing of cars loaded with soft coal to stand a long time with the load in same, it is recommended that steps be taken to do away with these practices as much as possible.

Your committee believes that if the above recommendations are followed out, and if care is taken to repaint the outside and underneath cars at least every eighteen months or two years, coating the inside with crude petroleum or coal tar about once a year, that excellent results will be obtained.

Your committee has refrained from going into the sand-blast question in detail, as it is an open question as to whether the use of the sand blast is desirable for this class of work, on account of the hardships it imposes upon the men operating the same, and also on account of the expense attached to its use, due to the very rapid deterioration of the hose and nozzels."

TIN AT THE ST. LOUIS FAIR.

"ON THE PIKE,
"St. Louis Fair, Sept. 9th.

"DEAR BILL:

"Not seein' you this month account of being out here improving my mind and entertaining my body with the instructive and destructive exhibits of this great show, I am writing this letter to let you know how the World's Fair strikes a tin roofer. One of the first things I notice from a professional point of view is the large number of roofs that have been put up for a short time, and the fact that the archiects have been wise enough to select the sort of roofing that is good enough for a short time. No architect in his senses would think of recommending 'Taylor Old Style' for a building that is only going to last a year or two. These chaps that have been building the World's Fair have selected a composition prepared roofing, which is first-rate for temporary purposes, but which ain't worth shucks when it comes to a permanent building that is expected to last a generation or so.

"I have been told that a large number of the buildings of the World's Fair have been covered with this temporary roofing, and it is giving great satisfaction. I am glad to notice that there ain't no 'Taylor Old Style' on any of these buildings, because it would be a shame to waste such good roofing tin for such an immediate purpose, as it were.

"All over this country there are Government buildings, State buildings, army barracks, secret society halls and blocks of dwelling-houses which owners expect to use a considerable number of years. These buildings are covered with 'Taylor Old Style' tin. The World's Fair is a passing show. It springs up in a night, as it were, like Jonah's gourd, and disappears just as quickly."—RUFUS THE ROOFER in *October Arrow.*

RECORDS.

For purposes of their own and, in part, to exhibit the changes in advertising methods that a quarter of a century has brought about, the N. & G. Taylor Company exhibit on another page reduced fac similes of the first advertisement they placed in the *American Architect*—more than a score of years ago—and one of the series of cards they they are using at this time.

As they properly say, not many business houses can show so long and unbroken a record either in advertising or in business—not that we mean to suggest that the great Taylor business is but just reaching its majority, for it is much nearer the century mark. Now while this record, from their point of view, is interesting, it is not less so from our own. That a single business house, known as judicious and successful advertisers, should advertise *uninterruptedly* in the same journal for twenty-two years surely speaks well for that journal as a valuable advertising medium, even if no other advertiser had followed their course.

Now, the fact is that amongst the advertisers who honor us with their support and confidence in this week's issue, we can count fourteen who have been represented in our columns, *without interruption*, for a longer period even than the N. & G. Taylor Company.

As all of these concerns are amongst the most prosperous in the country, this record tends to prove the worth of judicious and, above all, *persistent* advertising.

NOTE.

The International Jury of Awards of the Louisiana Purchase Exposition have awarded to the Berger Manufacturing Company, of Canton, O., a gold medal because of the merits and artistic beauty of their "Classik" Metal Ceilings. This company has a booth at the St. Louis Exposition. It is constructed entirely of sheet metal, displaying to excellent advantage the beauty of their classified designs in metal ceilings and side walls.

"Classik" Ceilings were originated by the Berger Company, and are known the world over.

THE AMERICAN ARCHITECT AND BUILDING NEWS

VOL. LXXXVI SATURDAY, NOVEMBER 5, 1904 No. 1506

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Additional: Detail of the Liberaal Volkhuis, Antwerp, Belgium. — Villa Penazzi, Borgo, Panigale, near Bologna, Italy. — The Marietta Printing Establishment, Turin, Italy. — Terrace Details: Chateau de Montegalletto, Genoa, Italy. 48

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THE President of the American Institute of Architects, Mr. W. S. Eames, has made a suggestion with reference to the proposed alteration of the East Front of the Capitol at Washington which has distinct merit. Noting that much stress was laid on the fact that the Elliott Wood-Cannon scheme had been presented in the shape of a model and that the committee's architectural advisors, Messrs. Carrère & Hastings, would also exhibit their scheme in the shape of a model, Mr. Eames argues that even a model is not always convincing and to be relied on implicitly. Its advantages are many and obvious, and when considered only by men trained to disregard its false witnessing, it may be used with safety and to great advantage. But, when used to influence the uninstructed, it may be just as mischievously misleading as the "fudged" perspective drawing, with its highly colored foreground of irrelevant carriages, trolleys and automobiles, and its background of decorative cloud effects and fictitious distance. The signal defect of the model is that, owing to its absolute size, the eye takes in at the same glance parts of the building which can never be seen in the building itself at one and the same time after erection. This inevitably introduces cross or conflicting effects, which must have an unfortunate influence on the untrained observer or juryman. For this reason the model is really not so safe a guide as the architects' orthographic and perspective drawings, since many people are familiar with architects' drawings and know how to discount them, while everyone is familiar with architectural drawings in the illustrated papers and magazines, and through familiarity with the actual buildings has learned how to apply the needful corrections.

MR. EAMES suggests that, in view of the importance of the building and the desirability of doing nothing to alter its architectural effect unless it shall be altered clearly for the better, while making all use of drawings and models to scale, no final decision shall be made until the scheme has been carried out in a full-size model. From his experience in connection with the World's Fair buildings at Chicago and St. Louis, Mr. Eames believes that an appropriation of one hundred thousand dollars would be sufficient to enable the execution in staff of the scheme that the architect-advisors may finally see fit to recommend, and most of us will agree that the sum is none too large to expend in proving that the proposed design either is or is not just the right thing. For our own part, we watch with very grave apprehension this attempt to improve the East Front. As it stands, while not architecturally correct, it is architecturally good and, more than that, it is historically interesting. The curtain-walls now have a value which will, it seems to us, be lost when the central feature is so altered as to give the substructure of the dome the mass which architectural canons require. To lose the present effect of stretch and length, to minimize the importance of the Senate and House porticos, to reduce the East Front to an equivalent effect of tameness with that of the West Front would be a very real misfortune. For this reason, if any steps can be taken to make the final result a real betterment, no reasonable expense should be denied, not only to the responsible architects but to the people.

THE execution of full-sized models is not a novelty by any means, though they have been more often availed of by sculptors than by architects. The present statue of "The Republic," in the Place de la Nation, Paris, was long represented by a full-size model in staff, and the Arc de l'Etoile was for several years surmounted by a model in staff of the great quadriga which the sculptor Falguière hoped to be commissioned to carry out in bronze; and during the time of Napoleon III there was a staff model of a triumphal arch standing for some time in the Place du Trône, Paris. And what other than a full-size model was the Dewey Arch in New York? Was it not the hope and expectation of the several sculptors who labored on it gratuitously that they should eventually be paid to carry it out in marble? Richardson sometimes ran up a full-sized model of a section of a wall in the actual materials, and recently New Yorkers have seen a bay of their new Public Library in staff peering out over the enclosing hoardings. Mr. Eames's suggestion is not exactly novel and unusual, but it is none the less sensible and apropos.

BOSTON, of late, has been the scene of an instance of defeated ambition, one of those speculative hold-ups of a building enterprise that almost every one enjoys seeing brought to naught and the constructive costs charged against the speculator. The great department-store of Henry Siegel, on Washington Street, was intended to occupy an entire block, and title was successfully secured to all the land save the lot on the northeast corner, which was occupied by a small four-story hotel, of the lodging-house type. The

owner of this lot declined all offers made for his land, believing that the lot was essential to the enterprise and that he could eventually exact a much better price than any that had been offered. In this he was mistaken, for, as we understand, it was at this time discovered that Mr. Siegel had already secured as much land as the law allowed him to occupy with a single building of the type he proposed to erect. Indeed, operations halted for a long time while an attempt was made to bring about a modification of the building-law, which would allow the building to be planned with a larger unbroken floor-space than the wise provisions of the existing law allowed. After hearings, which attracted much attention, a compromise was reached and the law so altered as to give a slightly wider range of floor-space between fire-walls. But so far as the little hotel was concerned the condition remained unchanged: the owner's get-rich-quick scheme had permanently aborted. But the hotel itself was still an obstacle, since the new excavation had to be carried far below its foundations, and hence the building had to be carefully shored up,—since it was of the brickwork of some forty years back, and so not of the best—and then carefully underpinned. This operation, common enough in itself, has absorbed the constant attention of a large sidewalk committee stationed on all four sides of the scene of operations, for never have they had so good a chance as is afforded by this immense excavation to see how modern builders handle what is always a very delicate operation, one which is usually carried on in a much more confined space which gives no standing-room for the idle onlooker.

MONSIEUR TUR'S paper on the French methods of dealing with municipal refuse, which we published a week or two ago, was interesting, if for no other reason than because it suggested that the adoption of the "destructor," which has of recent years acquired such vogue in England, does not always assure the wisest and most economical disposal of the wastes of urban life. The paper also contained other evidence of the active interest that is taken everywhere in matters of sanitation and the universal unwillingness to let this all important matter rest too long in one rut. Because of the desirability of spreading information, we will call attention to what seems to us to be a very unusual and very safe crop to raise on a sewage-farm. There is a very general, but not wholly reasonable, prejudice against using for human consumption crops grown on sewage-farms, but if fruits like strawberries and vegetables, like celery, which are eaten uncooked, be excluded, there is nothing to be feared in the way of infection. But the unusual crop to which we refer is one that is eaten uncooked, and yet its nature and the method of its growth are such as certainly to preclude all chance of danger, for the crop is the English walnut, and the sewage-farm at Pasadena, Cal., this year sells from its ninety-acre grove a crop of nuts that brings in upwards of seven thousand dollars. The rainless summer of Pasadena makes it possible to handle the farming operations with great certainty, and a great variety of crops are raised with success, the only novel one being the walnuts. Now the English walnut grows satisfactorily in southern Ohio and Kentucky, and those in charge of sewage-farms thereabouts would do well to look into the matter.

WHAT is to be the result of the workings of our own Department of Commerce and Labor it is too early to perceive clearly, but it is more than likely that organized labor hoped, and still hopes, that it may operate for the benefit of union labor only, in much the same way that a similar department operates in Australia. In that country, which has been brought to the verge of bankruptcy through its experimentations in Socialism, the Union man is favored and pampered by the government he has helped to install, at the expense of and to the detriment of all other interests. A recent report of the Public Service Board shows how the Minister for Works (Mr. O. Sullivan), who corresponds to our Secretary of Commerce and Labor, interferes to cause the reinstatement of any Union workman who may be discharged, even for the best of causes. The reckless way in which money is spent by the proletarian government which has its work done nowadays by day-labor is well shown in the case of the Prince Alfred Hospital, at Sydney. In this building the cost of the stonework was nine shillings and eightpence per cubic foot, while stonework of identical character for the Nurses' Home of the same establishment, which in some way had been built under contract, cost but three shillings and ninepence, or practically but a third as much as the cost under the day-labor system. The average cost of similar work under nine other contracts was but four shillings and twopence, while six sworn estimates for the work, if done by day-labor, resulted in an average of six shillings and threepence. From this it is fair to argue that government work in Australia under the present system is costing at least twice what it should. The excessive cost, however, is not the worst evil; that consists in the impossibility of maintaining discipline and efficiency amongst workmen who understand that, if they are discharged, the Minister will at once reinstate them. The warning that Australia furnishes to the United States is obvious.

WE are so wonted to seeing in print the names of the President and his Cabinet officers, and of Congressmen as well, we are so habituated to hear of appointments and removals of clerks, that most of us believe that it is by and through these men only that the country is ruled and public affairs carried on. The fact is that there is a third class of men, little known by name, who, if their superiors were removed, could still carry on the public business successfully without the people realizing how or by whom the work was done. These men are the under-secretaries and departmental head-clerks who hold, in this country as in all others, what are practically life-positions, for their knowledge of routine and the history of cases and the methods of procedure make their services practically indispensable. Massachusetts has just had the misfortune to lose the services of one of these almost indispensable, but fortunately not irreplaceable, men, through the death last week of Dr. S. W. Abbott, who for eighteen years has filled the place of secretary to the State Board of Health. There are no safer or more broadly useful public documents to be found than the reports of this body, and as they have, during his term of office, all been prepared by Dr. Abbott, their accuracy and the excellence of their arrangement and thoroughness of tabulation must be credited to his account.

BRICKWORK IN MODERN ITALY.[1]—II.

I FINISHED my preceding article on this subject by promising that to-day I would speak of brick buildings erected at Bologna, Turin and Genoa.

Choosing, like Dante's "Metelda," in this superb city of Genoa, which is the Italian city most cherished by Americans, choosing the fairest blossom which can interest us, tireless seekers after structures in which terra cotta has been accorded honorable treatment, it would not be possible for me to overlook the Chateau de Montegalletto, which is one of the most monumental structures of modern Genoa.

Like all the cities of old Italy, Genoa has renovated a portion of its streets and public places; the centre of the city has just been shaken from foundation to roof-top, but without an architectural success in any way surpassing mediocrity, and while masons build new structures along the ancient Via Giulia, which now opens into the very heart of the city, the Chateau Montegalletto, from the summit of a hill, smiles in the sunshine of Genoa the enchantress, smiles with the red of its brickwork cast lavishly over different dependences, smiles, I mean, at the pretentious structures in the new city below, which, with a few exceptions, do not know how to employ color other than the gray of the common stonework.

And to-day, whoever approaches Genoa from the sea cannot escape the view of the banners which float from the towers of Montegalletto. One of the boldest sea captains of Italy, Signor Enrico De Albertis, wished to erect on the ruins of the ancient walls a chateau where these same towers should create an impression of Genoa in the Middle Ages, for the style of the towers of this chateau draw their inspiration from the monuments of Liguria, erected during the time of the republic. So, the Chateau de Montegalletto leads the mind across the ages as far as the thirteenth and fourteenth centuries, a glorious time for Genoa and its maritime population.

This chateau was begun in 1886, and much time was devoted to discussing the plans by the architects chosen for the work, Signors Graziani, Parodi, Allegro, Crotta and the proprietor, in order to harmonize the requirements with the comforts of a seigneurial habitation, according to the taste of Signor De Albertis, and with regard to the requirements of art. Researches were carried into every quarter of the ancient city and throughout all the surrounding suburbs, in order to discover motives of construction and decoration, not less for the chateau itself than for all its details. Consequently, we here find motives which recall several monuments of ancient Liguria. Thus, in the arches of the sub-basement on the east side, and in the windows of the first story we recognize the most celebrated palace of the city, the Palazzo de S. Giorgio; in the crowning of the principal tower we recognize the tower called Degli Embriaci; in the windows of the sub-basement on the west side, we recognize the windows of the Palazzo Corrado Doria, near San Mateo, and so on, and so on. We should not forget to add that the cornice of the sub-basement copies the one still to be seen on an ancient house near Notre Dame aux Graces; a little loggia over the terrace, at one side, is part of the main building and belongs to a certain class of motives in carved bricks, such as we still see in some of the old Genoese buildings, or in the Riviera of the west, especially at Albenga; and the portico on the piazza which leads to the round tower on the south is partially inspired from the cloister of the ancient convent of S. Colombano in Bobbio; and, since statues are frequently used on the angles of old Genoese buildings, at Montegalleto we find that the statue of a herald has been placed on its principal angle, that which faces towards the sea, and this marble statue, with trumpet at its lips, seems to summon the friends of the proprietor to one of those amicable reunions so frequent at Montegalletto, for Signor De Albertis is a mariner who loves genial companions, else he would not have erected his chateau, which cost him a considerable sum, and, together with the collection it contains, represents one of the most precious nooks of Genoa. It is not here the place and the moment for speaking of Signor Albertis's collections, and yet I should be altogether wrong not to speak a word about some of the things which we find in the rooms—all the more that several of them are connected with long voyages of the proprietor to Colombo, and can only be seen at Montegalletto. During a visit which I made, I was asked to remark a brick taken from the Great Wall of China, brought to Genoa by Signor Albertis, also a bit of rock built into one of the façades of the chateau, which, together with several shells, he brought from the Island of Watling (the San Salvador of Columbus)—the first land discovered by Columbus during his first voyage—at the time of making a pilgrimage to that part of the American continent;—Columbus is always in evidence at Montegalletto. Within its walls, Signor De Albertis wrote his noted work, in Italian, "*Le construzione navali e l'arte della navigazione di tempi di Cristoforo Colombo*" (Naval Construction and the Art of Navigation at the Time of Columbus); and in its rooms Signor De Albertis directed the building of the models of the caravels on which Columbus sailed to the discovery of the New World—models which received the warmest praises at Chicago during the Exposition, and which are still exhibited in the Gallerie Brignole, Sale De Ferrari, at Genoa.

THE HERALD: CHATEAU DE MONTEGALLETTO, GENOA.

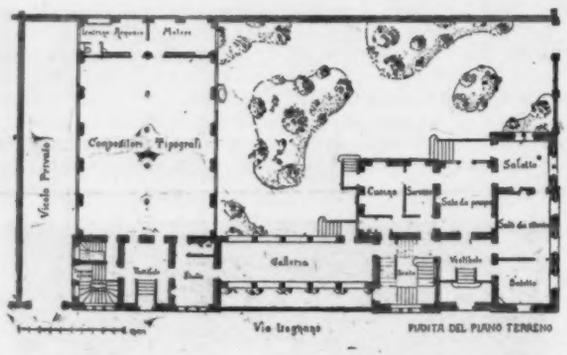
Unwilling to longer dally over these things, which, although justifiable, seeing that it is an Italian writer who is dealing with an American audience, would carry me rather far beyond the limits which I have set for myself, I return to Montegalletto and its construction, in order to draw attention to its picturesque movement so far as concerns its *avant-corp*, its terraces and loggias, where brickwork, sometimes simple and sometimes intermingled with the whitish background, plays a leading part.

It is admirably beautiful, this Montegalletto, with the brilliant red and the white of its mortar joints and marble finish, silhouetting itself against the background of the hill-side, often blended with it by the fresh verdure of the ivy, which flutters to and from

[1] Continued from No. 1498, page 85.

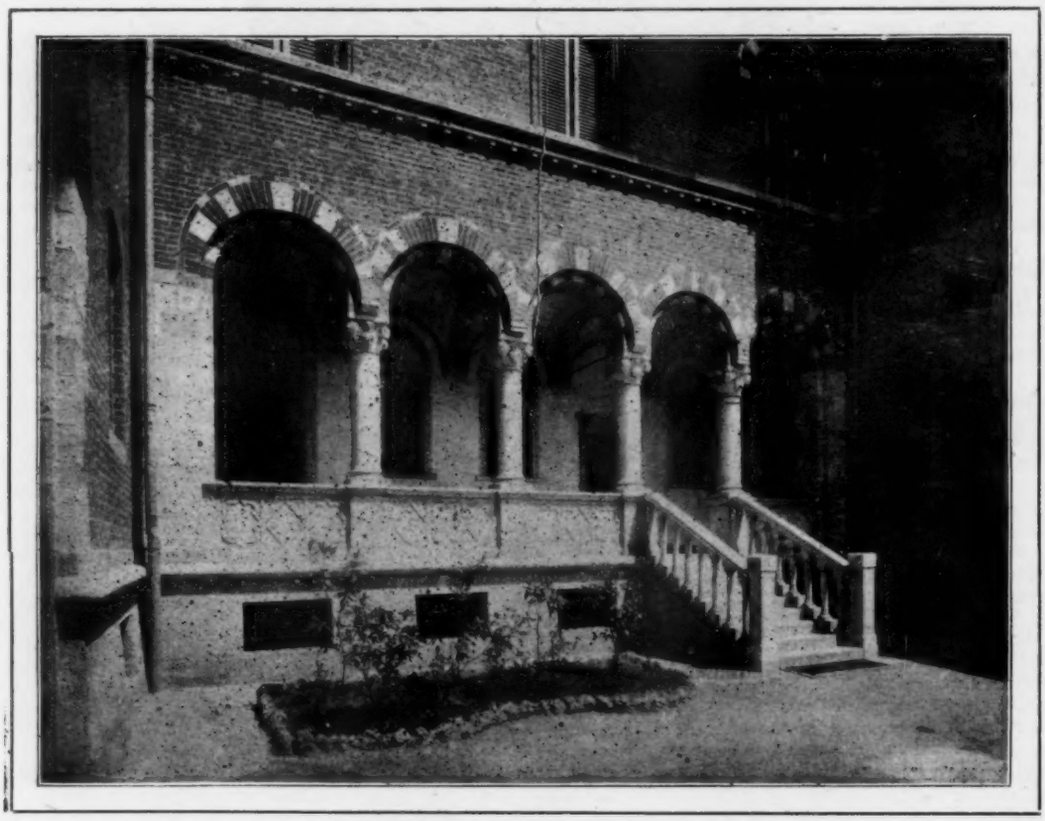
its walls, like a small child who is playing with his mother and does not wish to be caught, while approaching her as closely as possible.

Everything has been studied lovingly here, and the ensemble, except the pictorial decoration of a certain room, has been highly eulogized. For my part, I must make certain reservations, for I am not the friend of imitators and copyists; but, considering the times, which furnish architectural imitators, I must admit that on this ground, also, Montegalletto is worthy of being visited. The visitor experiences an impression of breadth and size which do not exist. In bringing about this unexpected effect, the employment of brickwork has its influence, and a profound influence, for the small dimensions of the squares give to the mass proportions which do not exist in reality. It must be added, however, that Montegalletto might have been extended over a larger area than that which it actually occupies; however that may be, "Genoa la Superba" may well be proud of the building which one of its most honored sons has bequeathed to it; and Signor De Albertis can fairly profess gratitude to his architects, Signors Graziani, Parodi, Allegro and Crotta, who have aided him in carrying out a serious undertaking and surmounting successfully all obstacles.[1]



PLAN OF THE MARIETTI PRINTING ESTABLISHMENT, TURIN.

Turin is not far from Genoa, and now I beg the reader to visit the rich capital of Piedmont, the city where the arts during antiquity did not feel the impulse which almost all other parts of Italy experienced; but, at all events, in modern times it has regained the lost time. Perhaps it is inconceivable to a foreigner to find, side by side with Lombardy and Liguria, which during the Middle Ages and the Renaissance received treasure on treasure of art, a region like Piedmont, that remained almost insensible to the movement of Italian art. The fact is that Turin, a frontier province, was often engaged in war, and the Piedmontese, subjected, especially during the Renaissance, to a series of calamities, were not able to give themselves over to the arts and make them flourish because of the consequent disastrous financial conditions. Nevertheless, there exists a Piedmontese art of the fifteenth and sixteenth centuries, an art rather of French leanings, Gothic, mediæval, delayed, just as Piedmont possesses a yet more ancient art of the eleventh and twelfth centuries in a certain number of churches; and churches and some castles form the artistic patrimony of Piedmont, insensible, as I said just now, to the movement of the arts in other parts of Italy, especially during the Renaissance. So I would draw the reader's attention to really fortified castles, which in goodly number are to be met with in the neighborhood of Turin, especially in the Valle d' Aosta and the Canavese; and these castles show in what manner the ancient inhabitants of Piedmont understood architecture. It goes without saying that in these ancient castles brick was much more frequently employed than it is to-day in Turin, where one of the most agreeable buildings of the kind is the house and workshop of Signor Marietti, of which I am able to give a complete illustration.



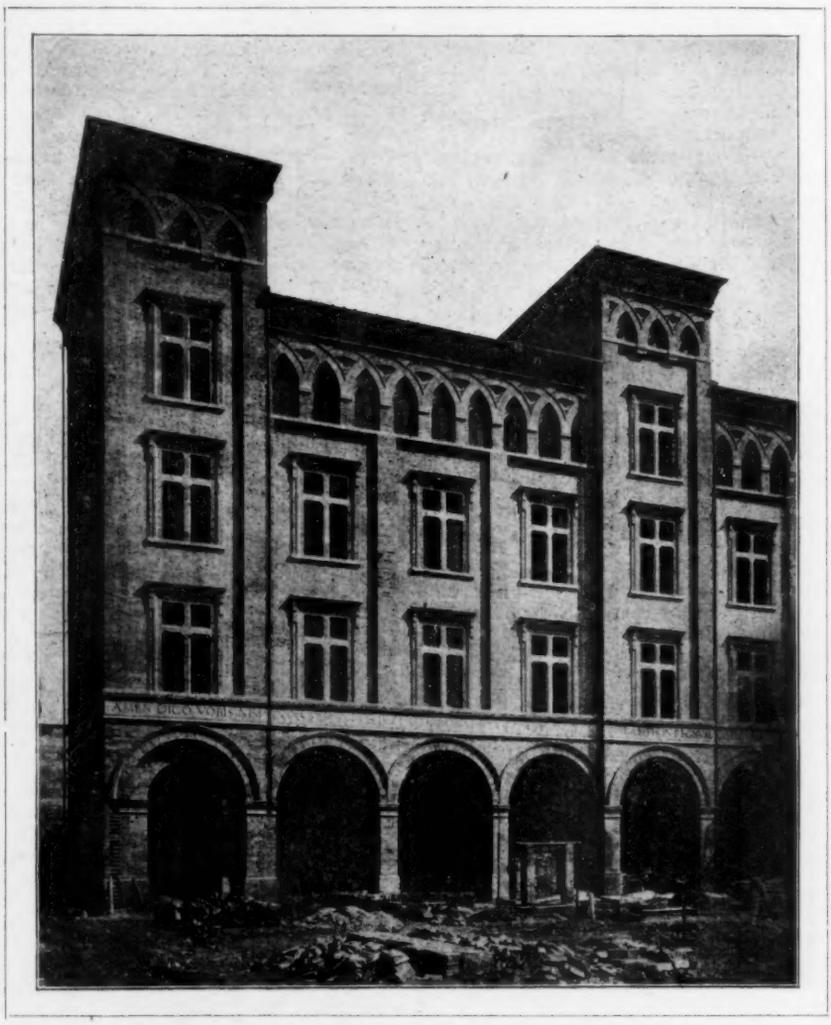
DETAIL OF THE PALAZZO GONZAGA, MILAN. C. ARPESANI, ARCHITECT.

The architect, Signor Molli, interrogated, just as did the architects of Montegalletto, the works of the Middle Ages. I beg you to remark the happy manner in which the architect has married the floriated frieze, just under the roof, with the brickwork, and note, also, the way in which he harmonizes the color-tones of his fresco with the stone skew-backs of his window-arches in the second story. Here is an instance of a very artistic application of fresco-

[1] Signor De Albertis has recently died.

work, and the red of the brickwork, enhanced by the whites which occur in its mouldings, in the archivolts of its windows, in the very colonettes and ornaments of the jambs, are so many sympathetic notes pleasantly added to the harmony of the architectural mass. Here we have an example that stone used with discretion need not be corrected by artificial coloring, as was the case at Milan, in the Bagatti-Valsecchi house; on the contrary, the white amid the red illuminates, and these splashes of color give the greatest pleasure to the eye.

In the phase of Gothic affected by Signor Molli, there is something which recalls Siena, the "red city." The windows of the lower story, quite sufficiently pointed, and the elliptical arches below, make a motive quite peculiar to the Gothic work of Siena, one which we come upon in several buildings of the celebrated Tuscan city, in the Palazzo Communale, the Palazzo Tolomei and the Palazzo Bonsignori; while at Florence, quite near Siena, nothing of the kind exists. Moreover, Tuscan inspiration might be deduced here from the little Madonna in adoration, piously isolated upon the side wall of the printing-office; it is evidently an imitation of one of the Virgins of Andrea Della Robbia, and has a good effect in the place where it has been set. I mean the effect is good from the point of view of picturesque treatment, for the dimensions of the sculpture are small for sculpture properly placed at such a height. From another side comes added assurance that the architect drew his inspiration from Tuscany. The roof. Do you note this roof, with its wide projection, with consoles whose silhouettes stand out against the background of the tower? This is absolutely in the Tuscan manner. It was common in the Middle Ages, as in the Renaissance; and at Siena, at Florence, at Pistoja, at Pisa, models may be found in as great a number as anyone could desire.



THE SALESIAN INSTITUTE, BOLOGNA. COLLAMARINI & REGGIANI, ARCHITECTS.

At Turin, at the time of the completion of the establishment Marietti, the architect was showered with favorable criticisms because he had attempted to revive the Italian fashion of painting the façade. In this connection was mentioned a little house at Bologna, painted by Signor Sezanne and executed in brickwork, just as at Turin, which was praised unstintedly. The Bolognese house, to tell the truth, from the point of view of pictorial decoration, is much finer and more exquisite than this one at Turin. But it was not, and is not, a question of the particular success of Signor Molli or Signor Sezanne; the question here is general—that of encouraging the fashion. Fresco-work and brickwork are easily combined, and the one with its flowers and figures corrects the barrenness of brick and stonework; and this is all the more necessary in a country like Italy, where parti-colored bricks are not in use, as they are in France and Switzerland and Germany. I frankly regret that the fashion has never made its way in the Peninsula, for it seems to be a source of very charming effects, as it is of graceful geometrical combinations.

Architecture, however poetry may color it, has its prosaic side, and would-be clients demand the cost of dwellings after they have enjoyed their architectural lines. For this reason, I have informed myself as to the cost of the Marietti establishment, a double sructure, intended one portion for a dwelling and the other for a printing-office.

The total cost is divided as follows: 60,000 lire (the reader will recall that the dollar is equivalent to five lire) for the dwelling-house and 40,000 lire for the printing-office, and this total may be subdivided as follows:—[1]

I have mentioned the painted house at Bologna, by Signor Sezanne; and this leads me to speak of the brick buildings of that city, which, the most important town of Emilia, absorbs a great portion of the architectural activity of that region.

Bologna, from the intellectual point of view, is to Italy what Oxford is to England, or Boston to America—a city of savants, and its celebrated University is one of the oldest in Italy. Because of the nature of its soil, Bologna, compelled to adopt brickwork, is no less a "red city" than is Siena, and its widest street, which has been opened into the heart of the city, has the red color of terra-cotta. So it is more charming, this road, than new roads generally are in Italian cities, and just at the end of this street, whose name, "dell' Indipendenza," makes us recall the wars of our political liberty, is found the house which interests us, glowing red with its brickwork. Apropos of this new Bolognese road, I wrote, almost as soon as it was finished (see my "Architecture au XIX Siècle"), "that it is a hundred times preferable to the streets of other Italian cities, gray and cadaverous as one about to die." It would not be proper to assert, however, that this new Bolognese roadway is a very chef-d'œuvre of metropolitan undertaking. On the contrary, I added, and I now confirm it, that on the ground of imitation, where the Bolognese architects halt, one might choose more important models than those which have inspired the buildings which line the "Via dell' Indipendenza."

Passing by the red houses lining this road into Bologna, one of the most remarkable structures erected in these last years is the

[1] See Footnote on page 46.

Salesian Institute, the work of a young architect, Signor Collamarini. The reader has before his eyes an illustration sufficient to judge this structure, in which brick is the only constructive and decorative material. Let us add that Signor Collamarini had a coadjutor, the Bolognese architect, Reggiani, to whom is consequently due a portion of praise for the wise sobriety with which the Salesian Institute has been conceived. For in the Salesian Institute the skeleton is magistral, and the decoration follows naurally the constructive lines, as ought always to happen in architecture.

The structure, 90 metres long by 15 wide, having a height from 20 to 25 metres, is all of brick, as I said just now, and the decorative elements are closely married to the structure by the adoption of tile-work in the cornices, the window-jambs, the mouldings of the arcades, etc. So, the dimension of this tile, or brick, is the key to the decorative system adopted by the archtiect. Proceeding in this way, one can build seriously and economically; and since we know that the Salesian Institute, which is of considerable dimensions, has cost only 130,000 lire, it requires no great effort to admit that brickwork, wisely handled, is an extraordinarily economical material. Of course, it is necessary to know how to handle it, and the Bolognese architects find themselves in exceptionally favorable conditions for creating models for the artistic and economical use of the material which interests us.

Signor Collamarini adopted terra-cotta for the tower of the church at Quarto Superiore, in the environs of Bologna, and here he combined rapidity of execution with economy of cost.

Since we are in the neighborhood of Bologna, it is good to remark that although architects here adopt brick for country houses, yet they might make a larger use of it, for terra-cotta work amongst trees and fields may produce very charming effects. For instance, here is a villa, the Villa Penazzi, at Borgo Panigale, a small village at the side of the railroad from Bologna to Pistoja; it is a cheap building, designed by a highly esteemed Bolognese architect, Signor Muggia, and is quite individual in aspect, for the stonework is really an imitation carried out in cement; the decoration, in which flowers and foliage hymn their eternal loves, is extremely inviting; the remainder, of brickwork, is, thank God (as John Ruskin, the enemy of all falsehood, would say), really brickwork; the effect, however, is a little harsh, but time will correct this, and the whole cost to the proprietor, including the stable and garden, was only 100,000 lire.

I could cite still other examples in this neighborhood, but I am not writing a treatise; I have wished to give you only a short essay on brickwork as employed in modern Italian buildings. So I will now ask you to examine a monument erected by the architect of the Italian Pavilion—that pseudo-Romanesque pavilion—at the St. Louis Exposition. Signor Sommaruga, my former pupil, here figures with one of his most tasteful creations, the Ossuary of Palestro, one of those monuments which Italy has seen arise in late years, patriotic souvenirs, which too often are essays of less than mediocre art. Signor Sommaruga's Ossuary recalls certain motives of the Siamese and Cambodian and older Kmer architecture, which we are especially familiar with since France gained a footing in Indo-China. It should be understood, of course, that I am speaking of the mass; at all events, we are here confronting a monument which does the greatest honor to its young designer, and all must admit that many people would like to make such a beginning as Signor Sommaruga has; for this is his début as an architect.

The monument is of brick, and is enriched with tile-work, mosaic and bronze. The effect is very charming in the midst of the rural scenery amongst which the Ossuary rises, and with which it makes so pronounced a contrast.

The Ossuary of Palestro is extremely organic, in this respect rivalling the structures designed by Signor Collamarini, and its cost was 25,000 lire, including the foundations, which were very costly, for they had to be carried down to a depth of 10 metres. The lightning-rod rises to a height of 32 metres above the basement, which measures 7 metres, and the interior of the Ossuary consists of a very simple square chamber, whose height is that of the basement, and is about 4 metres on a side, with four rectangular niches having a depth of 4 decimetres. In the centre opens up the crypt, in which rest the bones of soldiers.

Very beautiful, and in modern taste, the inscription over the entrance reads: "May the love of country, which is here gathered, become an aspiration for the fraternity of all nations."

I cannot close my essay better than with these words, inspired by the natural love which must unite together all peoples in the joyous reunion of fraternity!

ALFREDO MELANI.

NEGLIGENCE.

NEGLIGENCE is a fault often attributed to the professional man; but in a large number of instances the charge is not easily substantiated. What may appear to be negligence in one occupation or business may not be so in another. The charge, too, is not easily proved, especially in the complex duties of the architect's sphere. We have heard of charges being brought against the architect for imperfect drains, for settlements owing to the yielding foundations, for failure of column or girder to carry its load, for collapse of floors and roofs. For some of these things blame may be attributed to him on the ground that ordinary skill and reasonable care were not used. But these words may bear different significations. How is the term "ordinary skill" or "reasonable care" to be defined? It admits of degrees. What might be considered ordinary skill in the planning or construction of a simple building would be extraordinary skill in the case of a complex building, in which the arrangement and construction implied considerable ingenuity or experience. And the same remark may be said to apply to "reasonable care" or "negligence." What would constitute negligence on the part of the workman or foreman could hardly be sufficient to render the architect liable. Of course, we are aware that a distinction ought to be drawn between an error of judgment in design or a structural matter like the size or section of an iron column or girder, and a want of skill in, say, a question of heating or ventilation, or some mechanical installation, which is a subject rather outside the architect's province; or the negligence of not inspecting the foundations of a wall or pier to bear a great concentrated load, and that of overlooking the joints in drain-pipes. In the first instances the actual safety of a building depends on the area of the column or pier and the reliable nature of the material, and it affects the reputation of the architect as a skillful constructionist, while in the last instances the culpability or responsibility entailed is not so direct, being rather outside the architect's province, or devolving on those who were specially engaged to superintend, as an architect could not possibly find time to be on the building during the laying and jointing of drain-pipes, or in seeing that the foundations were duly excavated and the concrete properly mixed and rammed. The law, it is true, does not always draw these distinctions, but holds generally an architect liable for breaches of duty. It has been pointed out that defective design is a more important thing than neglect. As generally known, in France the architect has been held criminally responsible if a man is killed by the fall of a building due to defective design—a very severe rule if carried out in cases where the accident is due to some neglect of shoring or other precaution. Then the question arises, "How can a charge of negligence be established?" It cannot be always proved by the architect's personal absence—a very ordinary mode of proving. To take, for example, the foundations of a building. The architect could not be present more than an hour or so on the day of his visit—a very unusual frequency if he visited every day—and if there is a clerk of works there ought to be no absolute necessity why the architect should personally and minutely examine the foundations, or test every load of concrete

Dwelling-house.[1]

	Total.	Per square Metre.
Excavation and transportation of old material	1,506	476
Walls, vaults and roofs	22,888	7,247
Pavements	3,699	1,172
Cut stonework	12,940	4,097
Gates, gutters and cresting	5,912	1,873
Ironwork	5,320	1,685
Finishing work	7,735	2,450
Total lire	60,000	19,000

Printing-office.

Excavation and transportation of old material	1,687	714
Walls, vaults and roofs	19,492	8,248
Pavements	3,412	1,443
Cut stonework	3,511	1,485
Railings, gutters and cresting	4,472	1,900
I-beams, columns and grilles	4,381	1,855
Finishing work	3,045	1,305
Total lire	40,000	16,950

or the manner in which it is deposited. In such a matter as drain-laying it would not be reasonable to expect the architect to examine personally every pipe before it is covered up, to see that it is properly jointed. Even in brickwork it would be expecting too much of the architect to inspect and test every brick that is used in the facing. Personal examination, however necessary, cannot be always taken as the measure of careful supervision. To constitute neglect, a person must prove that the architect has not thought about the work, that he has made no provision for it in the drawings or specification; which are things not easily proved. A person may bring a charge of this kind without knowing the actual facts. It is easy to blame the architect for a defective electric-light installation, or some other trade for which he had certified completion, when a careful investigation would have shown that the architect had used every precaution to insure success. How often a charge is brought against him that he has been negligent in giving a final certificate for a work that was defective or incomplete, or that the certified amount was excessive, as if the client was able to determine the point in such cases. But in a recent case ("Chambers *vs.* Goldthorpe," 1901) it was decided that the employer had no redress against the architect as agent for a negligent decision which was given between the employer and contractor upon a matter under the contract. The architect in such cases has been held to occupy the position of an arbitrator in deciding upon the final amount payable under the contract, and was therefore not liable to the employer for negligence; but if the architect is acting only as agent to the employer, he would be held liable for a negligent decision or certificate. In the ordinary course of a contract, a tradesman may complete his work and ask the architect for a certificate, in the usual way. If the architect complies and certifies for a final amount, without having examined the tradesman's work, or taken the trouble to test its efficiency, he is certainly negligent. The certificate given has to be honored, the employer must pay the amount certified; but he may recover from the architect the sum negligently certified. Yet in such a case it is very difficult to assert that the sum certified is in excess of what is due. Who but the architect is capable of deciding the point? But suppose the work done is inefficient; we will suppose the contract is for the heating apparatus and hot-water supply, and that the results are not satisfactory. The architect, before giving his final certificate, has not satisfied himself of the work performed—he has not examined the apparatus, or tested the circulation; in such a case he has negligently certified, and the employer has a good ground for complaining. If he finds the temperature cannot be obtained, that the radiators do not give out the required heat, or that the hot-water circulation is defective, and that he cannot get a hot bath, he naturally looks to his architect for reparation for having certified the full amount. But there are so many qualifying circumstances that every case must be determined on its merits. We have known of instances in which the importunity of the contractor or tradesman to get a certificate is so great that the architect, unadvisedly, grants the request, but obtains a verbal promise from the contractor that he will make good any defect that may be discovered to the architect's satisfaction. The architect does this at his own risk, and on the faith of the contractor; but experience has proved the error of such a conciliatory mood. To expedite the completion of a building the architect may also do things that are at least irregular and unbusinesslike. We know of one case where a tradesman was allowed to undertake to carry out some fittings before any agreement or contract was made, and the architect gave his final certificate on completion. Afterwards the work was found faulty, and the committee blamed their architect for passing the work. It transpired, however, that the architect had used his best efforts to induce the clerk to the board to get the tradesman to sign a contract, and he had, furthermore, written expressly disowning any responsibility should the work not turn out satisfactory. In these circumstances it can hardly be contended that the architect was liable for failure, though no doubt his right procedure would have been to have refused to give a final certificate till the contract was signed. A clause in most contracts to the effect that certificates issued during the progress of work do not constitute the architect's approval of the work done, is generally inserted. It may also be necessary to introduce another clause to the effect that the contractor is not to be exonerated from making defects good simply because the architect has inspected the work during progress.

Many so-called acts of negligence may be made out from the architect's failure to discover defects and mistakes, as in the cases of drainage and foundations we have mentioned. An instructive case was heard at the Staffordshire Assizes a week or two ago. The action was brought by the vicar of Christ Church, Stone, Staffordshire, and his church-wardens, to recover damages from a firm of architects on the ground of alleged negligence by the defendants as architects engaged in the re-erection of the nave roof and aisles of the church. The defendants were architects practising at Stoke-upon-Trent. In 1895 the church authorities determined to have the church rebuilt, and the defendants prepared the plans and specifications. A tender was accepted (the original estimate was £3,000), and after the work was done the plaintiffs alleged that, owing to the defendant's negligence the builder did not do his work properly, and that rain fell from the roof, and draughts were complained of. Defendants were written to; but nothing was done to remedy the condition of the roof. Other architects were called in, when it was found the slates were not of the quality specified, nor the tiles, and that the boards of the roof were unseasoned, and had shrunk, letting in the rain. The work was put right by another builder, and the cost the plaintiffs now sued for. It was alleged the defendants had given the builder a certificate showing that the work was properly done. For the defendants, it was contended there was a necessity to keep down expenditure, as the estimate had to be cut down by £500; and they had to do the best they could with the lesser amount, and were hampered in the effort to combine cheapness with efficiency. It appears that much satisfaction was expressed with the church; but the roof was found faulty. Adequate supervision was given. In the evidence the merits of felt as a roof-covering were pointed out. The plaintiffs endeavored to show that the architects had not followed the best system; but the defendants called several witnesses to prove that the draughts were not caused in the way alleged, and that the system adopted was a good one, and that the defendants had done all they could with the means at their disposal. There was a necessity to keep down expenditure. The jury found for the plaintiffs for £274, the amount of cost incurred in making good the roof, less the counter-claim of £103 for architect's fees. We have here an instance where a firm of architects are charged with negligence in not seeing the builder did his work properly in the construction of a roof of a church—a serious charge if established. From the evidence reported, it appeared that an examination of the roof showed that the "slates were not of the quality specified;" that the boards of the roof were not seasoned and had shrunk, and that draughts were common; it also appeared that felt had not been used. If these allegations were true they would account for the non-rainproof condition of the roof and its draughtiness, and would imply either neglect of the specification or negligent supervision. Without detailed particulars it is impossible to say which. There was a necessity to reduce the cost; but it would not have been justifiable on the architect's part to use an inferior quality of slates, or to provide unseasoned boarding, or to dispense with felt to cut down expenditure;—such a course would have been to invite disaster, and the architects would have been to blame, for such precautions are a necessary part of good construction. If these matters were left to the builders without adequate superintendence, there would also be negligence on the architect's part; but it would be difficult in such a case to say whether the architects were wholly responsible. Proof would have to be clearly adduced before a charge of negligence could be established. On these matters the terms of the contract are important. One legal authority writes: "There is no case which decides what is implied by law when the contract is general, or not sufficiently distinct, or altogether silent on the point. If an architect were to undertake to superintend the erection of works, it is apprehended that a reasonable amount of attention would be implied, and that if any loss were occasioned by any neglect on the part of the architect he would be liable. And there being no decision which defines the limit of the architect's authority in the general superintendence of the works, in the absence of any express agreement, we apprehend that evidence of usage would be advisable, and that the usage would be imported into the contract." The same writer says that "if a man's duty arising out of a contract is not clearly defined in the agreement, and consequently has to be implied, and no legal authority can be found to assist him—if he can only ascertain what is reasonable, he will discover that which in the large majority of cases the law would enforce, and on which he may rely as a guide." When a duty imposed by a contract has to be implied, it is safe to conclude that the law will dictate a prudent and reasonable course. Lord Coke has indeed affirmed that the "two pillars of the law are reason and authority." Therefore, the safe and only rule alike confirmed by nature and law in all doubtful cases of failure of building, defective roofs and the like, is to apply this principle—that a common-sense view of such failure will often suggest that it was owing to some care-

lessness on the part of the workmen engaged in the absence of the control of the foreman or clerk of works, rather than to the architect's negligence or his want of care in design. We can apply this principle to nearly all those cases of bad material or workmanship which so often arise, and which employers are so often disposed to blame the architect for—shrinking floor-boards or roof-boarding, inferior bricks or slates, defective foundations or bad drain-laying. In the absence of direct evidence that the architect passed these defects or seldom paid a visit to the works, or that his design is faulty, he should certainly be given the benefit of the doubt, as the most reasonable and considerate course. In the case we have cited at Stone there appears to have been negligence, though to what extent is not clear. When the architect is to be held responsible for some shortcoming in the heating, or ventilation, or lighting of a building—a rather unusual condition—the intention should be made clear in the terms of the agreement. Unless there is undoubted evidence furnished in the drawings and specifications that the design is defective or the architect's judgment wrong, it appears to be unreasonable to lay down any rule as to the supervision he is to bestow: the architect is the best judge when and how often to visit the works in progress. Of course, we have considered the question of negligence in a general way, when there is no definite rule in the contract; when, however, the terms are clearly expressed, the law will not afford any relief to the builder, however absurd or unreasonable the matter is. A man who contracts to do that which is impossible has to take the consequences or pay damages; but the architect does not usually make himself responsible for the materials or workmanship he has to look after; and therefore, if he uses ordinary caution, he cannot be held liable.—*The Building News.*

ILLUSTRATIONS

[Contributors of drawings are requested to send also plans and a full and adequate description of the buildings, including a statement of cost.]

SKETCHES IN AND NEAR PHILADELPHIA, BY MR. D. C. ALLISON: BLIND ASYLUM, OVERBROOK, PA.; MUSEUM OF ARTS AND SCIENCES, PHILADELPHIA, PA.

THE LIBERAAL VOLKHUIS, ANTWERP, BELGIUM. M. J. VAN ASPERN, ARCHITECT.

THIS plate is copied from *l'Emulation.*

EXTENSION OF ALEXANDRA PARK COLLEGE, MANCHESTER, ENG. MR. H. ASCOUGH CHAPMAN, ARCHITECT.

THIS plate is copied from *Building News.*

OSSUARY AT PALESTRO, ITALY. SIGNOR G. SOMMARUGA, ARCHITECT.

FOR description, see article, "Brickwork in Modern Italy," elsewhere in this issue.

CHATEAU DE MONTEGALLETTO, GENOA. SIGNORS GRAZIANI, PARODI, ALLEGRO AND CROTTA, ARCHITECTS.

THE BELFRY AND THE CHURCH OF ST. LEU, AMIENS, FRANCE.

THESE subjects are copied from *La Construction Moderne.*

Additional Illustrations in the International Edition.

DETAIL OF THE LIBERAAL VOLKHUIS, ANTWERP, BELGIUM. M. J. VAN ASPERN, ARCHITECT.

VILLA PENAZZI, BORGO PANIGALE, NEAR BOLOGNA, ITALY. SIGNOR MUGGIA, ARCHITECT.

FOR description of this and the following plates, see article, "Brickwork in Modern Italy," elsewhere in this issue.

THE MARIETTI PRINTING ESTABLISHMENT, TURIN, ITALY. SIGNOR MOLLI, ARCHITECT.

TERRACE DETAILS: CHATEAU DE MONTEGALLETTO, GENOA, ITALY. SIGNORS GRAZIANI, PARODI, ALLEGRO AND CROTTA, ARCHITECTS.

NOTES AND CLIPPINGS

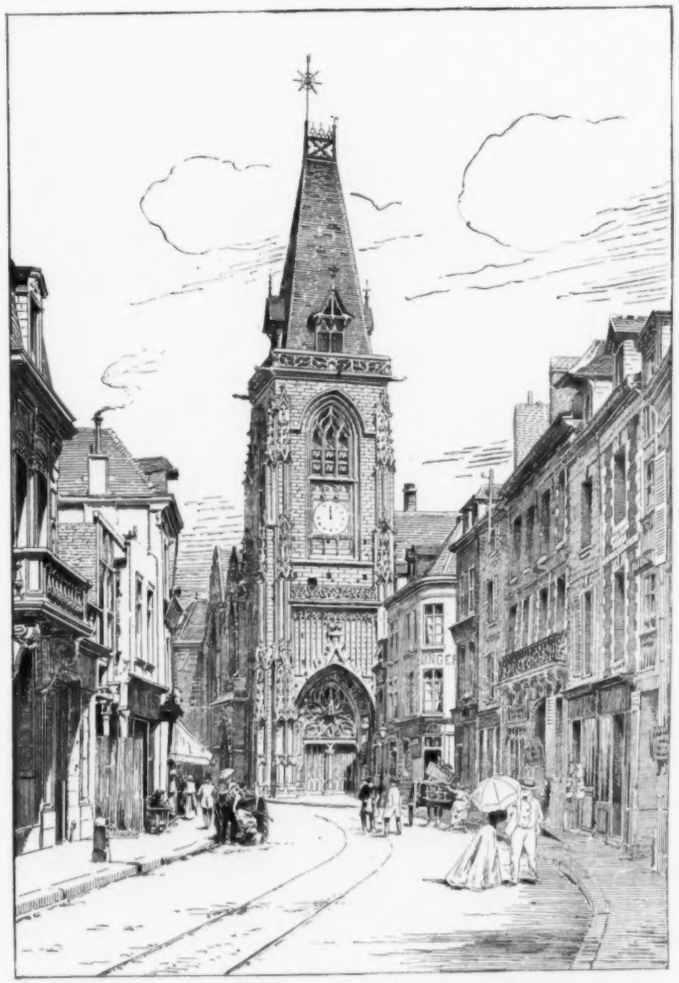
KING HENRY'S TOWER AT WINDSOR.—Henry III's Tower, Windsor Castle, which is now being prepared as a residence for Prince and Princess Alexander of Teck, used to be known as the Lieutenant's Tower, because it was the residence of the lieutenant of the castle. When Wyatville restore the castle the name was changed to Henry III, under whose rule the tower was originally built. During the greater part of Queen Victoria's reign it was occupied by her private secretary, Sir Thomas Biddulph, and after his death by his widow until her death in 1902. The residence includes not only the tower but a later annex, in which are the best rooms, those in the tower itself being comparatively small owing to the immense thickness of the walls. The rooms on one side look out on Castle Hill, and on the other on to the garden of the Round Tower.

HOUSES FOR THE POOR IN GERMANY.—The report of the Verein Reichs-Wohnungsgesets for 1903 and the first part of 1904 has just appeared, giving a summary of the efforts that are being made to provide suitable homes for the poorer workingmen in the German empire. The work that is being done in this direction in many German cities, such as Berlin, Ulm, Munich and others, has been described at length in *Public Opinion*, but the report of the society mentioned above gives a brief birds-eye view of the while situation. There are in Germany five hundred societies formed for the purpose of constructing houses for the poor. In the past years numerous associations of employés have been formed, the one in Berlin, for example, numbering 8,400 members, and having 531 houses constructed and 418 in course of construction. Societies are also being formed for the purpose of erecting colony houses, among which the most important is the one at Neidenburg in Prussia. The insurance companies to a large extent provide the funds for the building operations. Various communities have constructed houses either for workmen in general or for the employés of the city, but this plan does not seem to have been sufficiently developed or to be reconcilable with individual initiative. Many night asylums for the poor have been erected by various cities. Frankfort-on-the-Main is building a home for widows and orphans, and many cities are planning for the erection of habitations in common. In many cases the land on which the homes are built is public property, the surface rights having been ceded to the building associations. Such a use is made of certain crown lands of Prussia by the Berlin union of employés and of imperial lands at Wilhelmshaven, where a garden city has been erected. The municipalities of Charlottenburg and Frankfort have granted similar privileges. The amount of public land available for this purpose has been increased in many cities by the levying of a direct tax, the proceeds of which are to be devoted to the purchase of land. In some places a tax has been levied on the unearned increment. The general question of legislation for workingmen's dwellings is being agitated by the Verein Reichs-Wohnungsegesets.

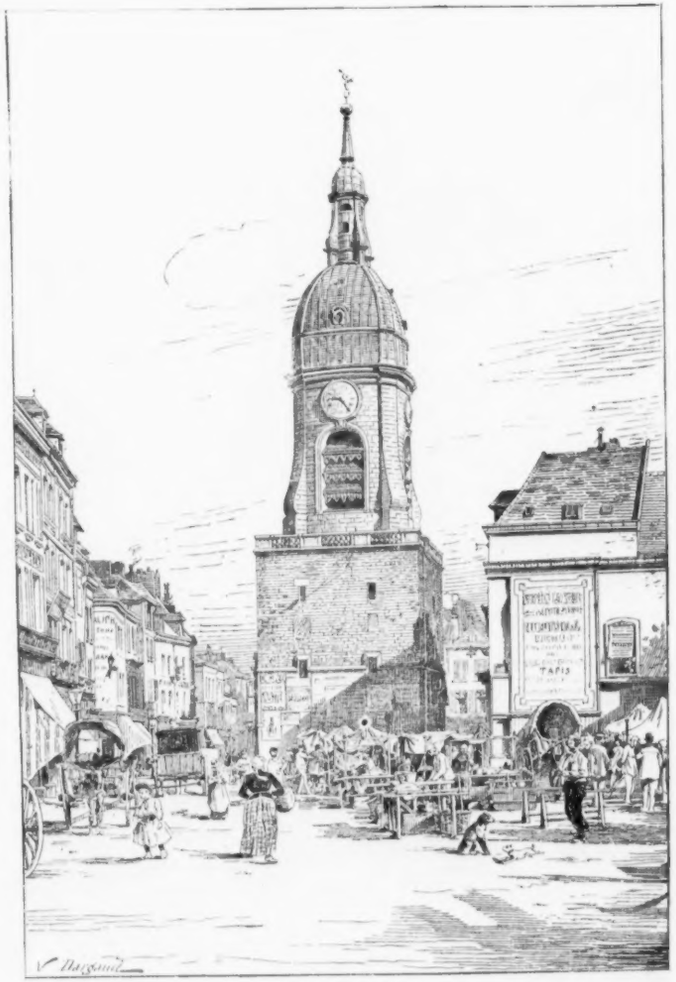
CARILLON BELLS.—The London *Mail* says there is only one church in England which has a "carillon" of bells—in this case, thirty-five in number—and that is the beautiful parish church of Cattistock, a small country village in Dorset. The fine tower and the bells were largely the munificent gift of a former rector, who added foresight to his benevolence by leaving money to pay for the maintenance and insurance of both tower and bells.

LOS ANGELES PLANTS A FOREST.—Los Angeles, Cal., has 3,000 acres of brush-land called Griffith Park, which it intends to convert into a commercial forest. This will be the first instance of a city in the United States creating a forest. The practice is quite common in Europe, where the forest-parks have not only contributed to the pleasure of the people, but have been more than self-supporting through their timber output. Under its coöperative offer the Bureau of Forestry had last summer at Los Angeles four of its experts, making a comprehensive planting plan for the forest. This plan was completed at the end of September. The idea is to convert a waste piece of land into a productive forest, which will not only pay for its creation and care through the sale of mature timber, but will prove a constant source of pleasure and recreation for the citizens of Los Angeles. It is an entirely practical plan, and Los Angeles deserves credit for its progressive spirit. Other cities could very profitably follow this excellent example.—*Exchange.*

AUTHENTICATING WORKS OF ART.—A prominent advocate of the Paris Court of Appeals has drawn up an interesting plan for an office whose function shall be that of authenticating works of art. According to this scheme every work of art is to be registered by its maker and successive purchasers at the public office, and its history and whereabouts made a matter of record, the fees to be a small percentage of the selling price.—*N. Y. Evening Post.*



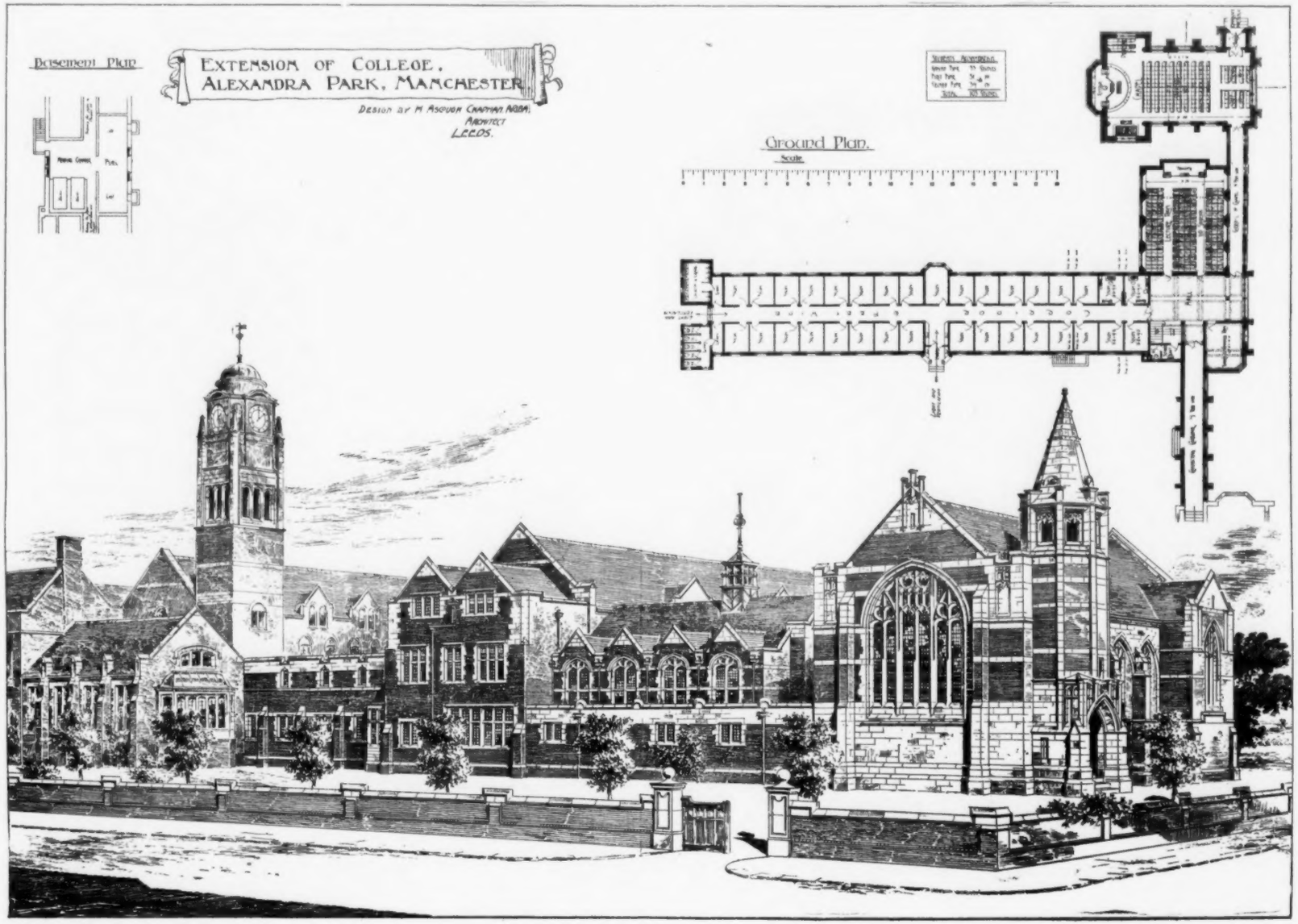
The Church at St. Leu.



The Belfrey.

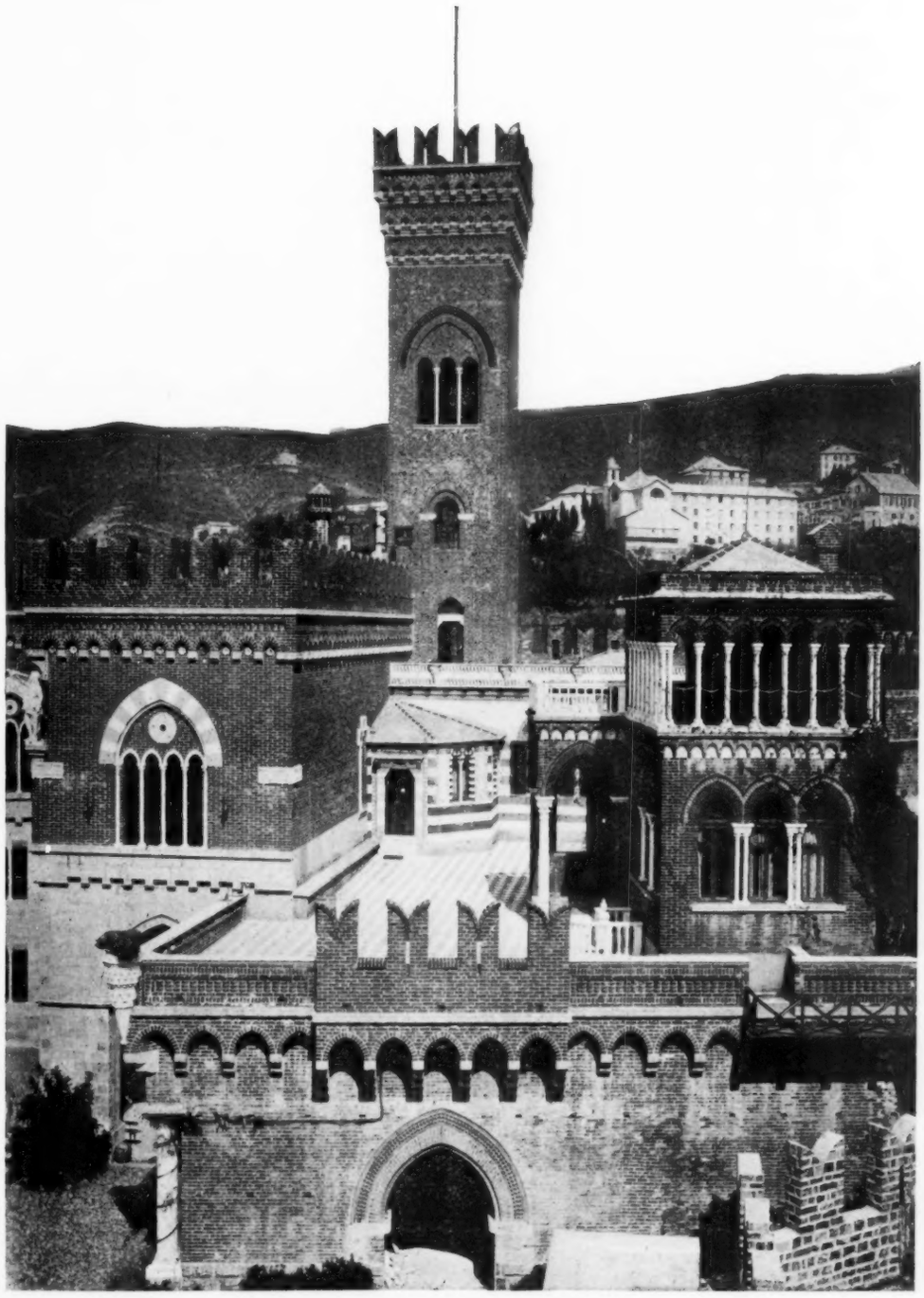
Sketches in Amiens, France.

From La Construction Moderne.



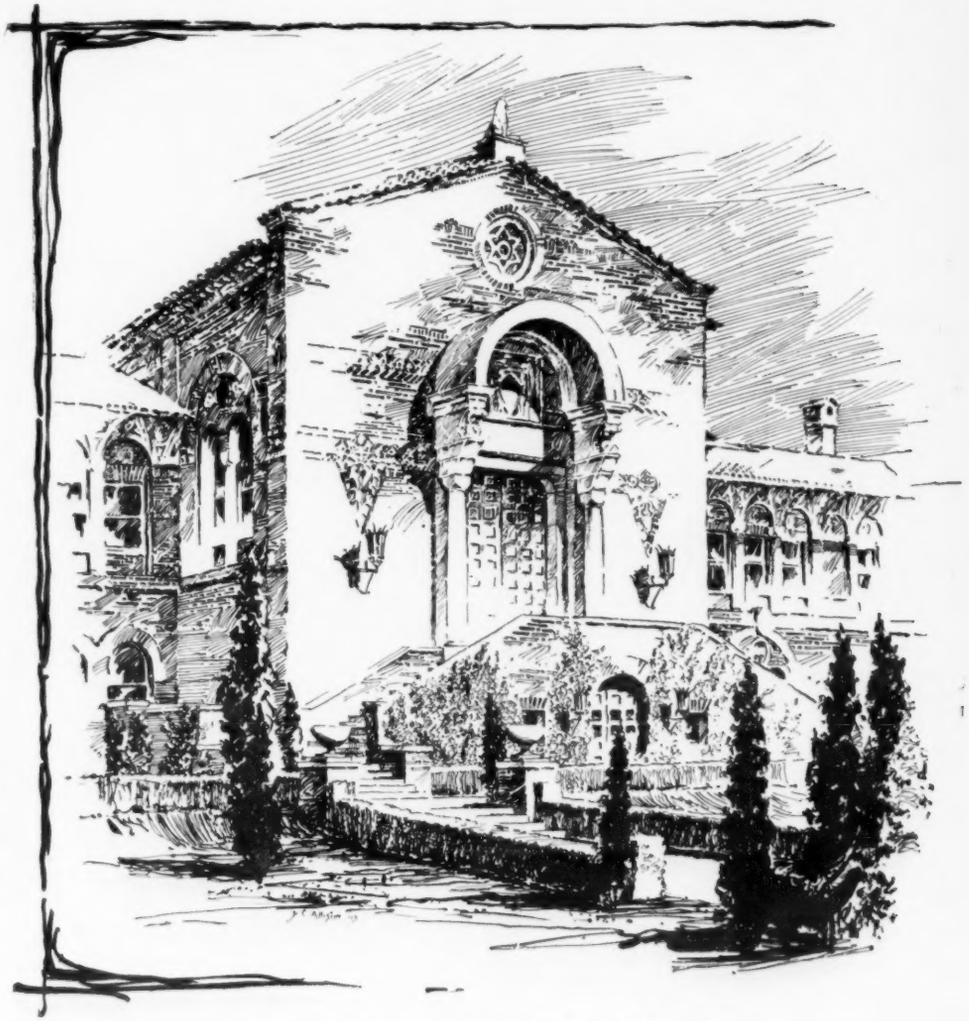
From the Building News.

Ossuary at Palestro, Lombardy, Italy
G. Sommaruga, Architect.



Chateau de Montegalletto, Genoa, Italy.
Graziani, Parodi, Allegro & Crotta, Architects.

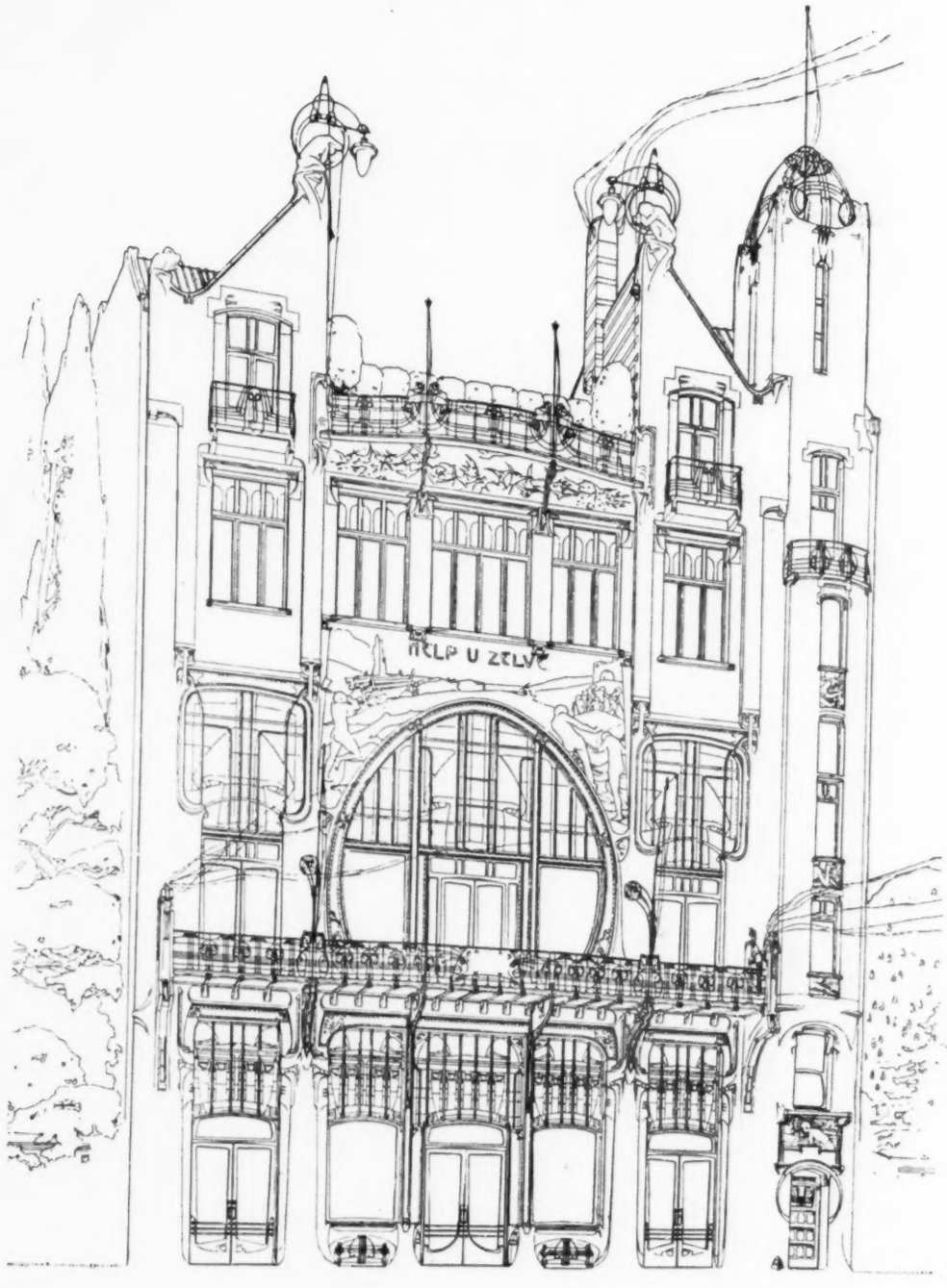
Blind Asylum, Overbrook, Pa.



Museum of Arts and Sciences, Philadelphia, Pa.

Sketched by D. C. Allison.

The American Architect,
November 5, 1904
No. 1506



The Liberaal Volkhuis, Antwerp, Belgium.
J. Van Aspern, Architect.

From l'Emulation.