

November 15, 1889.]

THE CALIFORNIA ARCHITECT AND BUILDING NEWS.

Mission and First, five-story frame, gas and plumbing work. Owner J. Prandenstein; architect P. R. Schmidt; contractors Duffy Bros.; cost \$1,175; signed Nov. 4; filed Nov. 6.

Market between 4th and 5th, California Academy of Sciences with California marble and building stone Co.; architects Percy & Hamilton; cost \$28,000; sureties O. T. Dyer and J. A. Brennan, \$15,000; 75 per cent. as work progresses balance 35 days from final completion; payments made on 1st of each month.

McLea Court and Ninth street; two-story frame. Owner, Magdalena Messner; architects, John & Balzanski; contractor, Jacob Klein; cost, \$3,200; signed Nov. 6; filed Nov. 8; payments, frame up, \$1,000; enclosed, \$800; outside finish, \$2,100; accepted, \$800; 35 days, \$1,300.

Masonic and McAllister; two-story frame. Owner, Jacob Schlosser; architect, R. Zimmerman; contractor, K. Thaler; cost, \$7,500; signed Oct. 16; filed Oct. 23; payments, all frames up, \$1,400; roof on, floor laid, building enclosed, \$1,400; rough coat mortar on, \$1,400; accepted by architect \$1,425; 35 days after completion, \$1,875.

Ninth near Market, one-story frame. Owner, R. P. Doolan; architect, F. T. Doolan; contractor, John McLeary; cost, \$2,350; roofed and timed \$800; brown coat on \$800; accepted \$850.

Ninth near Market, three-story frame. Owner, T. Doolan; architect, F. D. Doolan; contractor, M. P. Doolan; cost, \$16,000; payments, 75 per cent. as work progresses, balance on completion.

Natoma and Seventh, three-story frame. Owner, M. B. Gevy; architect, John T. Kid; contractor, Chris Peterson; sureties, Frank P. Lataon and A. W. Starbird; cost, \$2,300; signed and filed Nov. 2; payments, additions complete, \$435; complete inside, \$435; white-coated, \$435; complete, \$430; 35 days, \$575.

Natoma, No. 1023; alterations, etc. Owner, Margaret McCormick; architect, John T. Kid; contractor, Chris Peterson; sureties, Frank P. Lataon and A. W. Starbird; cost, \$2,300; signed and filed Nov. 2; payments, additions complete, \$435; complete inside, \$435; white-coated, \$435; complete, \$430; 35 days, \$575.

O'Farrell No. 235; alterations, etc. Owner, F. A. Paddock; contractor, Geo. Houston; time, 30 days; cost, \$1,275; signed Nov. 2; filed Nov. 8; payments, ready for rustic \$1,000; brown coat on, \$1,000; doors and windows in, \$1,000; 35 days completed, \$1,275.

Oak near Webster, two-story frame. Owner, Mrs. M. M. Lataon; architects, Percy & Hamilton; contractor, O. E. White; time, 100 days; cost, \$13,000; signed and filed Nov. 7; payments, 75 per cent. as work progresses, balance 35 days after completion.

O'Farrell and Laguna streets; frame. Owner, Fred I. Frisel; architect, T. J. Welch; contractor, J. J. Dunn; cost, \$12,493; signed Nov. 4; filed Nov. 8; payments, first story joints are on, \$1,300; studing up, \$1,300; cornice up, \$1,300; brown mortar on, \$1,000; white coat on, \$800; complete, \$1,800; 35 days, \$5,493.

PAGE, between Devisadero and Broderick, two-story frame. Owner, Margaret Nolan; architects, Shea & Shea; contractor, Richard Sinnott; sureties, C. S. Holmes and W. J. Adams; cost, \$5,000; signed Oct. 15; filed Oct. 29; time, 90 days; payments, frame up, \$1,050; brown coated, \$1,050; outside primed, \$1,050; 35 days, \$1,050.

Pacific and Steiner; carpenter work. Owner, Mrs. N. Kittle; architect, W. J. Mathews; contractor, J. B. Gwynne; cost, \$1,425; signed Oct. 21; filed Nov. 2; payments, one-half work completed, \$534; completed, \$534; 35 days, \$857.

Pond, between 16th and 17th streets; two-story frame. Owner, Mrs. D. Van Iderstine; contractor, O. E. White; cost, \$3,000; signed Oct. 17; filed Oct. 18; time, 68 days; payments, brown mortar on, \$1,000; completed, \$1,250; 35 days after acceptance, \$800.

Park avenue. Alterations to hospital; D. Buckley, contractor; Huernie & Everett, architect; cost, about \$5,000.

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Post and Octavia; frame. Owner, Joseph Fohelm; architect, John Marquis; contractor, J. H. Makay; cost, \$5,400; signed October 21; filed October 24; payments, frame up, \$1,000; ready to lath, \$1,000; outside finished, \$1,000; 35 days after completion, \$1,350.

Seventeenth near Noe, frame. Owner, O. M. and Margaret Duane; architect and contractor, Augustus Kollner; cost, \$1,200; filed Oct. 15; time, Jan. 11, '90; payments, frame raised and chimney built \$350; enclosed and shingled, etc. \$350; first coat plaster on and plumbing done, \$400; 30 days after finished \$400.

Nanchez and Army; frame flats. Owner, Henry Nelson; contractor, C. Peterson; cost, \$1,250; time, 40 days; payments, frame up, \$312.50; brown-mortar, \$312.50; completed, \$312.50; balance, \$312.50, 35 days, filed Oct. 15.

Steiner, between Clay and Sacramento; changes and additions. Owner, George E. Brooke; architects, Townsend & Wycken; contractor, John Thompson; sureties, W. Weldon and H. Weldon; cost, \$1,575; signed Oct. 17; filed Oct. 21; payments, frame up, \$400; enclosed, \$250; completed, \$250; accepted, \$252; 35 days, \$292.

Stevenson and Willow avenue, frame. Owner, Lily E. Ransome; architect, J. C. Chadwick; contractors, Blanchard & Lane; cost, \$1,300; signed and filed October 16; time, 75 days; payments, frame up, \$800; brown mortar on, \$800; outside finish on, \$800; completed, \$800; 35 days, \$1,200.

Stewart between Mission and Howard; brick building. Owner, C. F. Jones; architects, Townsend and Wycken; contractor, J. O'Sullivan; cost, \$4,300; signed October 23; filed October 26; payments, walls up to grade, first floor beams on, \$1,075; walls up, roof and first coat of mortar on, \$1,075; accepted, \$1,075; 35 days, \$1,075.

Turk near Laguna; three-story frame. Owner, Mrs. Lizzie Lobree; architects, Chas. R. and J. M. Wilson; contractor, Henry Holmberg; cost, \$5,400; signed October 25; filed October 26; payments, rough frames up, \$1,000; brown mortar on, \$1,000; white plaster on, \$1,000; accepted, \$1,500; 35 days, \$1,500.

Third, near Howard, addition and alterations. Owner, M. Borgan; contractor, G. W. Hand; cost, \$850; signed Oct. 9; filed Oct. 23; payments, weekly payments \$35; balance on completion.

Twenty-Third near Alameda, two-story frame. Owner, James Ribby; architect, John J. Clark; contractor, Thos. F. Mitchell; cost, \$3,200; signed and filed Nov. 4; payments, frame 800; brown-mortar, \$300; inside finish \$800; balance 35 days after completion.

Turk and Pierce streets; two-story frame. Owner, Mrs. J. Webster; architect, John I. Clark; contractor, B. Hauer & Son; cost, \$2,800; signed Oct. 17; filed Oct. 19; time, 90 days; payments, frame-work up, \$500; brown coat complete, \$500; doors hung, inside finished, \$400; 60 days after completion, \$1,000.

Taylor street, No. 106; alterations frame building. Owner, M. Englander & Son; architects, Kenitzer and Kollfrath; contractor, E. R. Shain; cost, \$2,622; signed October 23; filed October 25; payments, brickwork done, and first and second story floor joints set, \$900; completed \$992; balance, 35 days, \$630.

Twenty-second and Guerrero; two-story frame. Owner, M. M. Donovan; contractor, C. E. Dunahie; cost, \$3,000; signed Oct. 21; filed Oct. 22; payments, frame up, \$750; plaster on, \$750; carpenter work complete, ready for painter, \$750; 35 days after completion, \$750.

Union Place and Green; four frames. Owners, E. Rave zani and G. Gagliardi; architects, Townsend and Wycken; contractors, G. E. Antonia and P. Antonia; cost, \$5,400; signed October 3; filed October 24; payments, frame up, enclosed and roofed in, \$1,600; first coat of mortar on, \$1,600; second coat of mortar and ash hung, \$1,600; 35 days after completion, \$1,600.

Vallejo, between Montgomery and Kearney, frame. Owner, A. Glover; architects, Townsend and Wycken; contractor, John Doherty; cost, \$2,617; signed Oct. 25; filed Oct. 30; payments, frame up and roof on, \$800; outside done, \$800; accepted, \$802; 35 days, \$805.

Van Ness Avenue and Grove street, alterations. Owner, Lena Harris; architect, Geo. E. Voelkel; contractor, R. K. Thaler; cost, \$13,705; signed Nov. 7; filed Nov. 9; payments, rafters on, \$750; roof on, \$1,000; brown mortar on, \$1,400; glass done, \$1,200; inside and outside finish done, \$2,000; completed, \$3,925; 35 days, \$3,430.

Van Ness Avenue and Jackson street; frame. Owner, L. Wehman; architects, Plask & Moore; contractor, J. B. Cogg; well; cost, \$27,100; signed Oct. 33; filed Oct. 28; payments, ready for first-story floor joists, \$1,500; frame up, \$3,000; enclosed and roofed, \$3,000; first coat of plaster on, \$3,000; interior plaster finished, \$3,000; work ready for painter, \$5,000; completed, \$1,000; 35 days, \$7,100.

Webster, near Grove; frame. Owner, Michael McCoy; architect, T. J. Welch; contractor, G. T. Kropf; time, 90 days; sureties for \$3,000, J. Wagner and C. Williams; cost, \$5,300; filed October 25; payments, frame up, \$1,300; brown mortar on, \$1,300; accepted, \$1,300; 35 days, \$1,400.

Washington, between Devisadero and Broderick, additions to two-story frame. Owner, David Voerner; architect, W. Winterhalter; contractor, Wm. Plums; cost, \$2,740; signed Oct. 17; filed Oct. 31; time, 55 days; payments, brick work done, \$600; outside finish done, \$500; accepted, \$540; 35 days, \$800.

COUNTRY BUILDING NEWS OAKLAND.

Curtis, near Twentieth street; 2-story frame. Owner, E. C. Veeder; contractor, H. H. Adams; cost, \$2,550; signed and filed Oct. 30; payments, enclosed, \$500; plumbing done, \$500; outside finished, \$500; painted, \$500; 35 days, \$650.

Oakland Avenue and Orange street; 2-story frame. Owner, George C. Perkins; architect, W. J. Mathews; contractor, W. N. Concanannon; cost, \$17,000; signed Oct. 25; filed Oct. 30; payments, 1.5 work complete, \$2,563; 2.5 complete, \$2,563; 3.5 complete, \$2,563; 4.5 complete, \$2,563; complete, \$2,563; 35 days, \$4,275.

Tenth street, near Broadway; 3 story brick. Owner, Pres. Board of Theological Seminary; architect, W. J. Mathews; contractor, W. Winnie; cost, \$5,045; signed Nov. 1; filed Nov. 2; payments, 1.4 completed, \$1,134; 1.2 completed, \$1,134; 3.4 completed, \$1,134; completed, \$1,134; 35 days, \$1,512.

Fifteenth street, between 10th and 11th avenues, flats. Owner, T. A. Downing; architect, R. Gray Frise; contractor, George Gale; cost, \$5,745; signed Oct. 18; filed Oct. 23; time, Jan. 20, 1890; payments, enclosed, \$1,436.25; brown mortar on, \$1,436.25; windows in, \$1,436.25; completed 35 days, \$1,436.25.

Clay and 12th streets; iron and slate work. Owners, Y. M. C. Association; architect, G. A. Bordwell; contractors, Conlen & Roberts; cost, \$2,315; signed Oct. 17; filed Oct. 23; payments, \$1,735; completed, \$580; 35 days.

Oakland View Hill; frame. Owner, John O. Calman; contractors, A. W. Pattani & Co.; cost, \$3,482; signed Oct. 12; filed Oct. 24; time, Jan. 12, 1890; payments, chimney built, \$1,000; exterior primed, \$800; completed, \$811; 35 days, \$871.

Adeline and 19th streets; 2-story frame. Owner, A. Fletcher; architects, G. K. Hill & Co.; contractor, P. F. Nels n; cost, \$2,382; Jan. 1, 1890; signed Oct. 23; filed Oct. 24; payments, foundation done, \$500; brown mortar on, \$600; completed, \$680; 35 days, \$596.

Tenth street, near Broadway; brickwork. Owner, Pacific Theological Seminary; architect, W. J. Matthews; cost, \$17.30 per thousand rough bricks; \$3.75 per thousand pressed brick; on stone work \$2.75; and 25 cents per foot for furnishing and setting terra cotta tile linings; signed Oct. 21; filed Oct. 24; time, 12 days from commencement; payments, 75 per cent. as work progresses; balance, 25 days.

Brush and 13th streets. Owner, Bertha I. Foote; architect, W. J. Matthews; contractors, Ingerson & Gore; cost, \$1,600; payments, work completed, \$302.50; completed, \$462.50; 35 days, \$575.

Clay and Twelfth streets; plumbing. Owner, Y. M. C. A.; architect, Geo. A. Bordwell; contractor, H. Maclaren; cost, \$1,795; signed and filed October 15; payments, rough work \$675; finished, \$570; 35 days \$450.

Block M. Fifty Associates Track; cottage; Owner, Lulu G. Jeffries; architect, C. K. H. R. superintendent, James E. White; contractor, H. M. Kirkwood; surety, W. S. Biglow \$450; signed October 14; filed October 16; cost, \$1,700; time, 90 days; payments, frame up, \$500; plaster on, \$500; completed, \$830; 35 days, \$400.

Jackson north of Twelfth; dwelling. Owner, Edwin Goodall; architect, W. J. Matthews; contractors, Pierer & Ruch; time, 130 days; signed October 4; filed October 18; cost, \$12,839; payments, for each 1-7 of the work completed, \$1,378; balance, 35 days, \$3,213.

Two story frame. Owner, Chas. Jacobs; architect, W. H. Weilbye; contractor, Wm. H. Griffith; cost, \$4,250; signed October 15; filed October 19; time to February 1, 1890; payments, brick work done, \$1,000; enclosed, \$1,150; completed, \$1,100; 35 days, \$1,100.

BERKELEY.

Dwight Way, near Fremont; 2-story frame. Owner, A. T. Eggleston; contractors, Higginson, Davidson & Co.; cost, \$2,069.50; signed Oct. 19; filed Oct. 29; payments, enclosed, \$413.90; brown mortar on, \$517.37; ready for paint, \$517.37; 35 days, \$255.

MISSION SAN JOSE.

Addition to Catholic church. T. Carraber; architect, T. J. Welch; contractor, Frank Davis; cost, \$1,094; signed and filed Oct. 28; payments, completed, \$794; 35 days, \$300.

NEVADA CITY.

Gehrting's brewery to be rebuilt; stone work completed; roof of corrugated iron; cost, \$11,000. other roofs in the city will be covered in the same manner.

ALAMEDA.

St. Charles street, near Central avenue; frame dwelling. Owner, Mrs. M. H. Pennell; contractors, George N. Quinn & Co.; cost, \$1,355; signed Oct. 10; filed Oct. 30; payments, frame up, \$250; enclosed, \$250; brown mortar on, \$350; completed, \$250; 35 days \$255.

Encinal avenue, between Walnut and Oak streets; cottage. Owner, John Brick; architect, John Stabight; contractors, Miller & Conant; cost, \$1,830; signed and filed Oct. 31; payments, frame up, \$100; chimneys built, \$440; ready for casing, \$572.50; 35 days, \$477.50.

Frame. Owner, Williams; contractors, Geo. N. Quinn & Co.; cost, \$1,650; signed and filed October 14; payments, frame up, \$250; enclosed, \$150; brown mortar on, \$350; completed \$500; 35 days \$300. Another frame. Owner, Halsey; same contract.

Block 17 Ala. Park Homestead; two-story frame. Owner, Henrietta E. Culver; architect, Schuler & Meeker; contractor, Wm. Winnie; sureties, O. Rosenberg and R. Jones; cost, \$2,986; signed October 19; filed October 23; time, to January 19, 1890; payments, framed, \$410; ready for plaster, \$468.50; first coat of paint on outside, \$550; completed \$708; 35 days \$750.

SEBESTOPOL.

Frame dwelling. Owner, George Allen; builder, T. O. Coon.

LOS GILICOS.

School houses soon to be erected.

SANTA ROSA.

Ludwig's Addition; frame dwelling; \$2,000.

The Grand Hotel is being altered and additions made.

Morgan street; two frame dwellings; architect and builder, T. J. Ludwig.

Plans for the Presbyterian Church have been prepared by T. J. Ludwig, architect.

Petaluma road; frame. Owner, J. F. O'Connor; Same locality, frame dwelling and barn; owner, Dr. R. P. Smith; contractor, J. H. Hayden.

GLEN ELLEN.

Frame; owner, W. Gordenkoa; contractor, John Rains.

LIVERMORE.

Tasajera Valley; additions. Owner, S. Williams; contractors, A. Weymouth and John McIver.

Aug. Harms is building an addition to his house and otherwise improving the same. L. M. Lyster is doing the work.

SACRAMENTO.

The Sacramento Foresters are reported to be considering the proposition of erecting a \$50,000 hall at an early date.

NOVATO.

J. M. Kill, a Petaluma builder, has taken a contract to construct a Catholic church at Novato. The contract price is \$8,200.

GEORGETOWN.

The building of A. A. Francis is having additions and improvements made; also a building by C. Hotchkiss. Several new cottages are being built; carpenters are in demand.

MODESTO.

Corner of F and Tenth streets, a two story brick building. Builder, Caris Brown; contractor, W. E. Hank.

SANTA CRUZ.

A. J. Meany of Merced, has been awarded the contract for building the new county jail, cost, \$24,884.

PLACERVILLE.

Garden Valley; building. Owner J. W. D. Phillip, lumber on hand.

SAN LEANDRO.

San Joaquin avenue. James Quinn, owner, two cottages about to be erected.

HAYWARDS.

Winton Road, two story residence; owner, John Foster, cost, \$3,000. Alameda add

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SAN FRANCISCO, CAL



November 15, 1889.]

THE CALIFORNIA ARCHITECT AND BUILDING NEWS.

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REVIEWS.

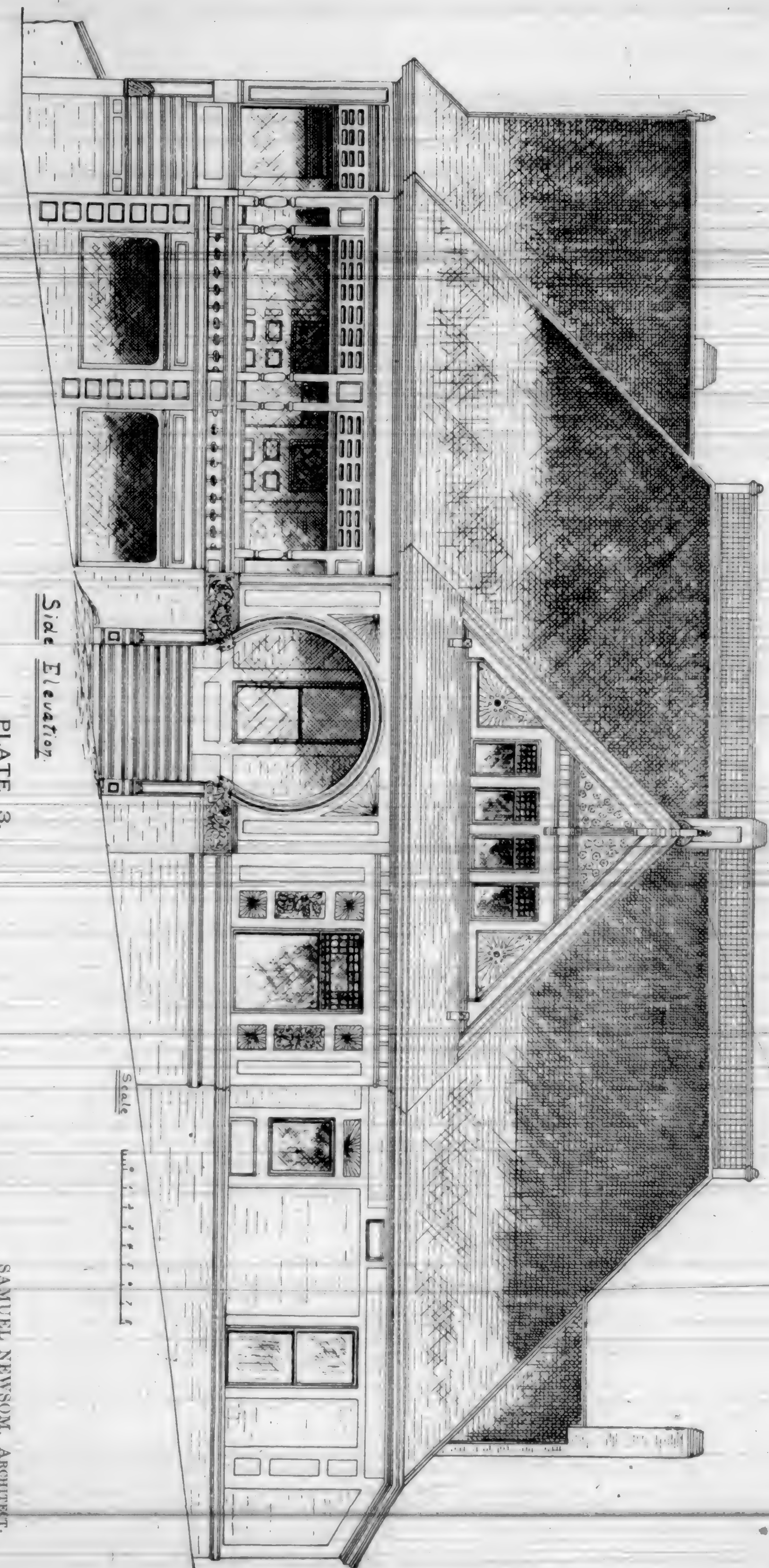
Revista dos Constructores, a journal published at Rio de Janeiro, has been received at this office. It is full of valuable reading and statistics of Brazilian matters.

Cutting & Delaney of Buffalo, N. Y., have recently published an artistically arranged little book entitled "Decorator's Lattice." It is bound in paper covers and is full of valuable information upon the subject of decoration, displaying as its chief feature about one hundred and seventy illustrations of decorative designs, many of which cover the full page. The price is 25 cents.

The *Scientific American* of September 28th gives an account and also a view of the method used at Ocean Grove on the New Jersey Coast for pumping salt water by means of the ocean waves. The contrivance is simple enough, and it is said that 40,000 gallons are pumped daily for street sprinkling purposes. If would only be necessary to increase the pumps and reservoirs to obtain any desired amount of water.

GENERAL SPECIFICATIONS OF HIGHWAY BRIDGES OF IRON AND STEEL," by J. L. Waddell, Consulting Engineer, Kansas City, Mo., price, 25 cents, is now in its second edition, and somewhat enlarged in size. The object of the pamphlet, as stated by the author, "is to bring about a reform in present methods of designing, letting and manufacturing bridges," but he seems to think that any reformation among country commissioners is almost impossible. To use his own language, "any reform through men who are entirely ignorant of the first principles of bridge building, or even the necessity of perfectly safe structures," can not be expected.

PERSPECTIVE; "A Series of Elementary Lectures by Ada Cone, late Instructor in Massachusetts State Art School; supervisor of drawing in Concord, N. H., public schools and Lecturer on industrial art to Teachers Institute; Pupil Museum of Fine Arts, Boston. For sale by W. T. Comstock, New York. A 12mo. volume, price \$1.00. Sent by mail, free of postage, to any part of the world." The author has improved the opportunity of filling a gap that has long been felt in the line of text books on perspective. It is quite evident from the manner in which the subject is treated that the author has made herself a companion among the students in their desperate struggles to untangle the confused snarls of perspective lines. She has found a way by which all extraneous thoughts and works are pushed aside from the work in hand. Not a letter, line or word in her little treatise that is not necessary, or that can be dispensed with. Her experience seems to have impressed upon her the importance of right words and lines, used sparingly, using only those having a direct bearing on the lesson before her. The work will be found of great value to young teachers who have not had sufficient mathematical training to enable them to grasp the instructions given in many of the text books now in use. The student without the assistance of a teacher will find in it sufficient encouragement to attract him to its study until he shall have mastered the elementary principles, which acquisition will give him a foretaste of its utility and beauty. We commend the work to all who wish to economize in time and labor in the attempt to master the elements of perspective.



SAMUEL NEWSON, ARCHITECT.

Technology Architectural Review—We have had the first numbers of volume two of this excellent journal placed on our table. We cannot speak too highly of it in commending it to the younger members of the fraternity. Each number seems to give the results of first and second "mention" in their monthly competitions, and on plates that are deserving of preservation. It affords us pleasure to quote from their circular.

The *Review* is issued from the Architectural Department of the Massachusetts Institute of Technology eight times a year. Eight numbers constitute a volume. Its size is eleven by fourteen inches; the text is bound with the covers and the illustrations are infolded. The plates are photographic reproductions from original drawings, printed upon very heavy stock. At least four gelatine, or heliogravure plates will accompany each number. The *Review* is protected and mailed flat.

Subscriptions, \$3 per volume, to be paid in advance.
Specimen copies, 50 cents each.

CURRENT PUBLICATIONS.

The *Building and Engineering Journal* of Australia and New Zealand for September 7th, contains the following articles: "Australian Building and Bush Work" by Fred Harrison, M. R. V. I. A. "The Source of the Under Ground Water in the Western Districts of N. S. Wales," by H. C. Russell, F. R. S., before the R. S. N. S. W.; also an account of the Royal Institute of Architects' annual dinner, containing much valuable information upon the issue of the day; illustrations, "Proposed Front Elevation of New Zealand and South Seas Exhibition, 1880-90," "Measured drawing of the Treasury Buildings," Hobart Tasmania and "competition drawings for a Village Club, by members of the Builders' and Engineers' Designing Club." For September 21st: "Some Suggestions for Economical Interior Decorations," by R. Gordon Hyndman, A. R. V. I. A., "Stress Diagrams of Solid Structures," "Study on Unity of Design, in planning New Towns and Suburbs," "The Operation of Power Companies and Power Transmission by Compressed Air," illustrations asketch from a colored drawing by Kenwood & Kerle architects, Sydney for a proposed hotel at Wollongong, New South Wales, also a design for a suburban residence by Chas. A. Ogg.

National Builder of Washington for October 12, contains: "Defective Plumbing in Old Houses," by E. J. Hannan. Including October 5th, the illustrations have been notably valuable, namely, Canterbury Cathedral, from the S. E., with towers, and Stratford-on-Avon, showing Guild Hall and Shakespeare's Grammar School.

November 2nd, John Ruskin on "Decorative Art" Illustrations, Outer Court of Trinity College, Cambridge, England.

The *Builder and Woodworker* for October, contains an article of importance on "Carpentry and Joinery," which has extended through several numbers back; chapter X has for its subject, "Battening and Grounding." For November, among the illustrations, first prize design, School House Competition, by the New York State Educational Department.

The *Woodworker* for October, publishes several articles of value. "Theory and Practice as Applied to Mechanics," by Mr. C. R. Tomkins, M. E., "Building and Repairing," by Mr. J. T. Langdon, and "Factory Fires," by Mr. George Fisher.

Building for October 12th, contains the following: "Sun Dried Bricks," by E. A. Gardner; "Mill Flooring," and an "Account of the Convention of the Western New York State Association." Illustrations, design of New York State club, in competition, subject, "A Well House in the Country," by Mr. C. H. Dash; competition drawings of the Building Sketch Club (third competition) subject, "Pair of Semi-Detached Houses on Suburban Lot," by W. S. Aldrich, of Portland, Me.; for October 19th, "Disasterous Effect of Spontaneous Combustion," "team Plants, for Isolated Electric Light Plants," "Change of Internal Structure in Iron," and "Artistic Use of the Imagination." Among the illustrations, design for residence in Building Sketch Club competition, by "Jersey Lightening" William H. Orchard, Rochester New York. For October 26th, "Criminal Court Plans," "Forest Fires," "Expertizents Upon the Transmission of Power by Compressed Air, in Paris," by Mr. Alexander B. W. Kennedy, F. R. S., before the Mechanical Science Section of the British Association at New Castle, September 17th. Among the illustrations competitive design for semi-detached houses, on a suburban lot, by John W. Lees, St. Louis, Mo., showing perspective elevation and plans. November 2nd, Sir Christopher Wren and his architecture from a lecture by Prof. J. Rogers Smith University College London.

The *American Architect* for October 5th contains the following: "Berlin Dwelling Houses," "The Problems of Concentrated Residences," "The Theory of mouldings and old Colonial Work of Virginia and Maryland." Illustrations: competitive design for the Cathedral of St. John, the Divine New York, by Messrs. Carrere and Hastings, architects. Also designs for same by T. P. Chandler, architect, and W. S. Fraser, architect. This competition has brought forth remarkable drawings. For October 12th, "The Restoration of the Ducal Palace, Venice," "London's water supply," "The Grant Monument Competition" and "Equestrian Monuments." For October 19th, "Safe Buildings," "Letters from Canada, Australia, Paris, Washington and

Chicago. Illustration, competitive design for cathedral of St. John the Divine, New York, by R. W. Gibson, architect, also by Messrs. Cope & Stewardson and Peabody & Stearns. October 26th, "Equestrian Monuments" (Joan of Arc,) designs for the Hinkle gold medal. November 2d, "Jean Paul Aube," "The Responsibility of Architects," "Baths for the People." Notes on competitive designs for the Cathedral of St. John the Divine. Illustrations for which are furnished by H. M. Congdon, architect, New York.

The *Inland Architect* for October contains articles upon the following subjects: "The Art Exhibition at the Chicago Exposition, Notes and observations," by H. C. Payne; "The Artistic Use of the Imagination," by Louis H. Sullivan, architect; "How shall we Build," by J. C. Yost, architect; "Sketching on the Continent," and "Rules and Regulations Governing the Drainage and Plumbing of New Buildings in Chicago." For illustrations: "Ranch House" by Wilson, Marble & Lamson, architects; Chicago, Illinois, residence at Rochester, New York by Otto Block, Architect; St. Louis residence by C. C. Helmer, architect; Trinity Episcopal Church, Michigan City, Indiana, by Henry F. Starbuck, architect; Chicago Tenement Block, by G. W. and F. D. Off, architects; Minneapolis, Minn. Country Residence, Grape Creek, Illinois, by Irving K. and Allen L. Pond, architects; Chicago, Illinois, thirteen story office building by J. M. Van Osdel & Co., architects; and an office building by Mason & Rice, architects, Detroit.

The *Sanitary News* for October 19th contains articles upon "Management of Garbage in Large Cities," "Household Sanitation," and "Purification of Sewage by Electrolysis," giving a synopsis of a paper upon that subject read by W. Webber before the British Association, demonstrating the destructive power of electricity upon sewage matter. October 26th, "Steam Plant for Isolated Electric Light Plants," by Prof. J. W. Sweet of Rochester City, before the Convention of the State Association of Architects at Syracuse, N. Y.

Scientific American for October contains designs of the memorial monument of the battle of Langside, A. Skirring, architect; Wynn Memorial Public Library Massachusetts, H. H. Richardson, architect; New Court House and Post Office, New Bedford, Massachusetts. The Mexican Pavilion at the Paris Exhibition and the Fitzwilliam Museum, classic design, Cambridge, by George Basier, architect; November, "Cathedral of Seville," with illustration; "Strength of Stone Masonry" by Prof. I. O. Baker, Illinois in Stone and "The Amiens Process of Sewage Purification," from Iron. Among the illustrations: New Post Office and Court House, Asheville, N. C. Christ Church, East Orange, N. Y.

The *Western Architect* of Denver presents a special edition for October with an increased number of designs handsomely produced. Contents: "Removal of Garbage," "Arches," by Mr. Ben Pitman, "Architecture of New Mexico," by Alexeris Compere, "Asphalt" and "Asphalt Again," from a Paris correspondent. Illustrations: Some Denver Doorways, viz I. Masonic Temple; II, Denver High School; III, Trinity Church; IV, Kittridge Building; V, Church at Santa Cruz, (three hundred years old) and a Denver residence by R. S. Roeschlaub, architect.

The *Engineering and Building Record* for October 5th contains a continued article on "Pavements and Street Railroads," illustrations perspectives, plans and erections, pumping station, Wakefield R. I. Water Works, Willard Kent, architect; Woonsocket, R. I. for October 12th an exhaustive and valuable article on the "Forth Bridge," illustrated by Benjamin Baker, (abstract of an address before the British Association,) also article on the "Removal of Rock under Water without Explosives" by Fred Lobnitz, Associate M. Institute C. E.; October 19th, presents a brilliant scarlet cover quite a contrast to its pale-faced contemporaries with an increased number of pages and containing "Electric Light Wire Problem in New York," "Thames River Bridge," and "Kanawha River Bridge," and the "Water Supply for the Paris Exposition." For October 26th, "Manchester Ship Canal," "Inspection of Cements," by F. Collingwood, Mem. Am. Soc. C. E., and "Sewerage and Land Drainage." For November 2d, "The Girard Hydraulic Railway Exhibited at the Paris Exposition." Explaining the method of propulsion and its adaptability to common usage. Diagram and statistics for proposed English Channel Bridge and "Building Construction Details," (Machinery Hall Paris.)

Carpentry and Building for October presents "Effects of Time on Slack Lime" by M. Faraday; "Masonry" (continued from July); an extensive correspondence from all over the country, and an extended criticism on "Graphics, or the Art of Calculation by Drawing Lines, Applied Especially to Mechanical Engineering," by Robert H. Smith.

The *Northwestern Architect* for October contains "Venetian Glassmakers" and "Stained Glass," from *Le Semaine des Constructeurs*, and "Building Stones of the Northwest." Among the illustrations is the residence of S. C. Gale, Minneapolis, L. S. Buffington, architect.

American Builder, Nov. 15, contains "Joints and Fastenings in Carpentry" and an article on "Masonry."

Journal of Proceedings, October 24, contains "Presidential Address of Mr. T. Mellard Reade, F. G. S., before the Liverpool Society, subject, 'Architecture, Ancient and Modern.'" "Scottish Architecture," by J. Alfred Gotch; "The Building of Blenheim," by Wyatt Papworth, and

Mr. Leonard Stoker's address before the Architectural Association, a paper filled with interesting matter for the profession.

Brickmaker for November: "Aluminum Street Paving Bricks," "Brick Burning with Coal Fuel."

BUILDING-LOAN NEWS.

Under this heading we propose from time to time to give some facts regarding these associations which are doing so much towards making homes for our people. Considerable attention is being directed at present to the new institutions being started in other parts of the country calling themselves "Nationals," "Americans," or some other over-spreading name, and inviting investments in their shares from every section. Our advice to our readers is to go "slow." The promises which these associations make are encouraging, and the temptation to invest is strong, but, let us stop and think awhile before sending the money to Minnesota or New York to be invested by strangers in strange ways. We say strangers, because we are advocating the support of local institutions, where the money is loaned by those we know, to those we know, and upon property we can see and value *ourselves* any day. There is no myth or mystery in any respect about our home societies! In this issue we shall only mention a few of our local societies and give their assets at date of their last loan statements, viz:

HOME SEC., Oakland, incorp'd	1875, loans & other assets,	\$133,393
Union - S. Fran.,	1881, " " "	351,304
Occidental - " "	1885, " " "	315,064
Citizens' - " "	1885, " " "	242,706
Homestead L'n. Berkeley,	1885, " " "	110,047
Home Mut., S. Fran.,	1885, " " "	89,188
Commercial, " "	1886, " " "	44,533
W. Oakland, Oakland,	1875, " " "	186,949
S. F. Mut L'n, S. Fran.,	1882, " " "	393,777
Ital. & Swiss, " "	1887, " " "	76,769
S. F. & Oak., " "	18 9, " " "	26,967

"The average number of shareholders in an association who are able to procure loans is found to be about one in four. Complaints frequently reach us that agents of certain national associations have represented that the number of shareholders who will receive loans is much larger than this. In fact, they are said to hold out to every subscriber the hope of obtaining a loan. We are satisfied ourselves, that their representations are not authorized. * * * They use too much rose color in painting the prospects to new members."—*Building and Loan News.*

Retail Price List of Lumber.

PINE, FIR AND SPRUCE.		Space, dressed, shelving	36 00
Per 1,000 ft.		" " 1/2 inch.	36 00
Rough Pine, merchantable to 40 ft inclusive.		" clear, " 1/2 inch.	33 00
" " 41 to 50 "		Rough dunnage, delivered.	20 00
" " 51 to 60 "		REDWOOD.	
" " 61 to 70 "		Rough Redwood, merchantable.	19 00
" 1x3, fencing.		" second quality.	16 00
" 1x4, "		" selected.	25 00
" 1x3, 1x4 and 1x6, odd lengths		" clear.	34 00
" second quality.		" merchantable boards	21 00
" selected.		" 1/2 inch surfaced.	31 00
" clear except for flooring.		" No. 1 do	34 00
" for flooring less than		" No. 2 do	25 00
flooring.		" T & G, 1x6, 12 ft. and	
Clear V. G. No. 1 Flooring, when ordered,		" over, No. 1.	34 00
extra.		" other sizes, No. 1	37 50
Fire Wood.		" 7 to 11, No. 1.	25 00
Dressed Pine, flooring, No. 1, 1x6.		" under 7 "	22 00
" 1x4.		" Rustic, No. 1.	35 00
" sizes, No. 2.		" 2.	31 00
" all sizes, No. 2.		" T & G b'ded 12 ft. and	
" Stepping, No. 1.		" over, No. 1.	34 00
" 2.		" other sizes, No. 1	37 50
Ship Timber & Plank, rough selected.		" 7 to 11 "	25 00
" select'd pl'nd, 1 sq. av.		" under 7 "	22 00
" " 2 "		" Sliding, 1/2 inch.	25 00
" " 3 "		" 1x3, 4x6, Clear, under 7.	22 00
" " 4 "		" Tank Stock, 2 and 3 inches, clear, (sur-	
Deck Plank, rough		" faced or rough,) under 12 ft.	27 00
" dressed, average 35 feet.		" Pickets, (fancy), 4 ft., B. M.	25 00
Pickets, rough, B. M.		" (rough, pointed), B. M.	18 00
" 1x1 1/2 - 4 ft. long.		" square, B. M.	16 00
" 1x1 1/2 - 4 1/2 ft. long.		" Battens, 1/2 x 3.	01
" 1x1 1/2 - 5 ft. long.		" Shingles.	2 25
" 1x1 1/2 - 6 ft. long.		" fancy.	3 50
" 1x1 1/2 - 7 ft. long.		" Posts, split.	17
" 1x1 1/2 - 8 ft. long.		" Shakes, split.	11 00
Furring, 1x2.		" sawed.	13 00
Lath, 1 1/2 x 4 ft.		" Lumber delivered on board cars will be	
Spruce, rough.		" charged \$1 per M extra. Lumber delivered	
		" along side of vessel or wharf, 50 cents per M	
		" extra. Scale of credit not to exceed 60 days	
		" without interest being added.	
		" Tongued and grooved beaded on two sides	
		\$2 50 extra.	

There are about sixty local associations in New York City, and say, forty in Brooklyn.

Ohio has organized a Building Association League, and California will follow her example in the coming spring.

New Hampshire has enacted the following amendment to Chapter 93, Laws of 1887: Section 1—Every building and loan association shall pay annually a tax of one per cent upon the whole amount paid upon its stock of shares which are in force, and no other tax shall be assessed on said stock or shares or against the holders on account thereof. Section 2—Building and loan associations shall be under the supervision of the bank commissioners.

E. B. Rambo, president of the Citizens Building Loan in an article published with the secretary's quarterly report of that society makes this statement regarding the so-called "Nationals": "Of all dues paid in, twenty cents with each dollar, or 16 2/3 per cent, likewise, goes to their officers for expenses. Thus an enormous fund is collected for the benefit of these gentlemen, not the member's property at all. Had our Association collected such sums, a fund of over \$50,000 would have been distributed to officers only."

A preliminary meeting of The League of General Building and Loan Associations of the United States was held at Chicago July 25th, E. Summers was chosen secretary *pro tem*. Articles of Association were adopted, officers elected, and committees appointed to serve until November 13th, when a permanent organization will be effected. The following are the officers elected:

M. D. Miller, St. Paul, Minn., president; J. V. Ryan, Memphis, Tenn., vice president; Owen Scott, Bloomington, Ill., secretary; T. J. Bunn, Bloomington, Ill., treasurer. The associations represented may be stated thus—three "Americans"—two "Interstates"—two "Nationals"—one "International"—and one "North American". The secretary was instructed to communicate with those not present and urge their attendance on November 13th.

The contract for the construction of the Colorado Mineral Palace at Pueblo, Colorado, has been awarded. The architecture will be Egyptian in style. The building will cost over \$250,000, and will be one of the largest and handsomest in the West. It will be devoted to a permanent exhibit of gems and mineral specimens, not only from the mines of Colorado, but from all over the world.

The Board of Supervisors of Santa Rosa have resolved to build a \$10,000 jail.

With this number a change is made in the form of the *Building News*, by the addition of a *Trade Review*. This department, in time, will be enlarged upon, as well as other features of the journal.

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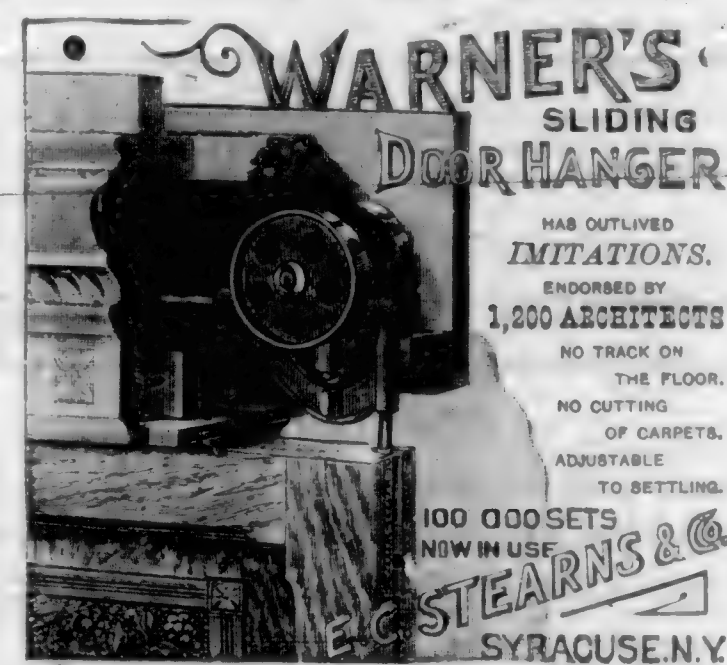
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The California Architect and Building News.

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408 CALIFORNIA STREET,

SAN FRANCISCO, CAL.

VOLUME 10.

DECEMBER 15, 1889.

NUMBER 12.

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Mr. George H. Wolfe, having no further connection with the business of this journal, correspondents will in future address their communications to the *California Architect and Building News*, 408 California street, San Francisco, Cal.

THE regular monthly meeting of the San Francisco Chapter, A. I. A., was held Friday evening, December 13th. The members present were Messrs. Babson, Sanders, Curtis, Percy, Pissis, Mau, Cuthbertson, Whittemore, Daley, Bestor and Everett.

Architects Farrell, of Tacoma, Bugbee and Capelletti of this city were present as guests, besides Messrs. Gilbert, senior and junior of Woodland, Blum, Wetmore and other gentlemen interested in the subject of the paper to be read.

An offer of the *California Architect and Building News*, to donate to the Chapter such of the exchanges of the past year as it might select to have bound, the volumes to become a part of the Chapter's library, was received and accepted.

Mr. Shimoda read an interesting paper on the "Architecture of Japan," past and present, tracing its growth from the earliest ages. Many carefully drawn designs and photographs of Japanese buildings were shown to the appreciative audience.

Mr. Shimoda was tendered the thanks of the meeting.

Mr. Sanders stated that the members of the class under his instructions were preparing original designs of a simple subject, to show their skill in treating it, and suggested that the Chapter encourage their exertions by offering a prize for the best design, and an honorable mention for the second. The suggestion was acted on favorably.

The Executive Committee was instructed to make arrangements for the first annual banquet to be given under the auspices of the Chapter.

The meeting then adjourned.

WE publish in the present number President Carlin's annual address before the Western Association of Architects, and President's Hunt's, before the American Institute of Architects. These addresses should be read attentively by every Architect in the country.

The position these gentlemen occupy, in relation to the profession, enable them to speak intelligently in regard to matters most vital for the advancement of the influence and professional standing of members of the profession.

CAPT. A. H. NICHOLS, of the American ship *St. Mark*, died at the receiving hospital on November 28th ult., from injuries received from falling into the basement of the building now in course of erection on the corner of Park and City Hall Avenues, the contractor having neglected to enclose the building with a fence as required by the city ordinance. One dark evening, Capt. Nichols, while walking past this place, was unfortunately enough to fall into the unguarded excavation, and was seriously injured that he died the next day as above.

In another column we chronicle a decision by the Supreme Court awarding damages for injuries received under somewhat similar circumstances. We do not know of any adequate compensation that the courts could award for loss of life. But we do know that we have laws, which if enforced would prevent such accidents, and officials whom we pay to see that the same are enforced.

It seems to us that the officer whose duty it was in this instance to see the law properly carried out should be found, and discharged for incompetency, if not otherwise punished for dereliction of duty.

THE Fire Department Committee of the Board of Supervisors has made a serious mistake in deciding not to recommend an extension of the fire limits. The reason alleged is that the lots on Minna, Jessie, Everett, Natoma, and other small streets within the proposed boundaries, are mostly owned by poor people, and that it would be unjust to compel them to put up brick or stone buildings. The extension would not have interfered with any buildings already in existence. Nobody would have been compelled to tear down his home and put up a fireproof one in its place. The effect of the order would have been merely to prevent the construction of any more wooden houses in the future.

Chief Scannell was right when he said that there should be a hundred blocks instead of forty in the new map, and that the refusal to extend the limits would be responsible some day for a fire that would wipe the whole southern part of the city out of existence. The poor people there are more interested than any other class in the community in preventing such a calamity, for they are the least able to bear the loss. And aside from that the whole city has rights which even poverty must respect. Public safety is the first consideration, and whether a man be poor or rich he must contrive to accommodate himself to that. It may be that we shall need a Chicago fire to teach us that a great city cannot afford to risk its existence to save a few lots.

owners the difference in cost between wood and brick, but when it comes, the new San Francisco that will rise from the ashes will have mastered the lesson.

The Fire Department Committee should reconsider its action. At least it should give the public what it offered to give Chief Scannell. The Chief, with natural impatience, refused to accept any further deductions from his original plan, but the people would rather have some protection than none.

The above, from the *Examiner*, takes the precise view of the case that we set forth in our last number. Since then Boston has suffered a loss of 10,000,000 by fire, and her neighbor, Lynn, has lost its business center from the same cause. San Francisco's turn has not yet come, but when it does we may desire to follow the advice given many years ago by *Frederick Law Olmstead*, who, in a report to the Committee on Outside Lands of the Board of Supervisors, had the foresight to recommend the city be divided into sections separated by broad boulevards, from 500 to 1000 feet in width. Though we did not adopt the sensible suggestions made by *Mr. Olmstead*, it is not too late to urge upon all growing cities and towns the wisdom of thus protecting themselves against the spread of a conflagration. By proper selection and planting of trees and the larger shrubbery, these wide streets or avenues become beautiful driveway sand parks for the comfort and enjoyment of citizens, and add much more than their cost to the beauty and attractiveness of the city so adorned.

PIECE WORK.

SAN FRANCISCO, Dec. 6th, 1889.

To the Editor of the *California Architect and Building News*:

DEAR SIR.—We, the members of Union 22 of Brotherhood of Carpenters and Joiners of America, desire to present for your consideration certain facts pertaining to *subletting* of carpenter work or *piece work* as it is called. From long experience we have attained a knowledge of the injustice and injury this practice causes to all parties concerned. We ask an opportunity to bring this matter directly before those most interested, viz.: the architects, owners and reputable contractors. It may not be generally known that there is a class of men, calling themselves carpenters, who are unprincipled, and unskilled, who are unable to do a good day's work, and consequently unable to obtain steady employment at regular wages. These men resort to piece work for a living, depending on their ability to slight work to make up for their lack of skill. Their methods are various, and we will describe them more fully if you will grant us the opportunity. We are happy to say that the better class of contractors do not as a rule find it to their interest to employ these incompetent mechanics.

Hoping you may be able to assist us in this fight for better work, we remain,

Yours respectfully,

UNION 22,
Brotherhood of Carpenters of America.

We understand this matter has been brought before the Builders Association of California, and a communication on the same subject sent to the San Francisco chapter of the American Institute of Architects. The matter is one of considerable importance to architects and owners as well as the carpenters, and we shall be pleased to do anything in our power to expose the slipshod methods of work shown by this communication to exist.—
Ed.]

PLANS FOR THE MECHANICS' INSTITUTE.

At the last meeting of the Directors of the Mechanics' Institute, two reports were submitted on the advisability of permanently improving their property bounded by Hayes, Larkin, Grove and Polk Streets.

The report signed by David Farquharson recommended the erection, where the Pavilion now stands, of a Library building entirely detached from all stores, devoted exclusively to the use of the Library, and that the property on Hayes Street be leased on graduated building leases for twenty years.

President Kerr recommended the construction of a four-story fire-proof building on Hayes Street, with stores for business purposes on the first floor, rooms for the Library on the second, reading and chess rooms and lecture halls on the third, and class rooms, etc., on the fourth floor. Either of the proposed improvements would cost in the neighborhood of five hundred thousand dollars.

It is probable that Architects will be invited to submit plans in competition, as Mr. Farquharson recommended offering the sum of five thousand dollars in premiums for sketch designs.

MR. R. M. HUNT'S ADDRESS.

BEFORE THE AMERICAN INSTITUTE OF ARCHITECTS.

FELLOWS AND ASSOCIATES OF THE A. I. A.:

THIRTY-TWO years ago a few architects convened in the city of New York for the purpose of considering the expediency of organizing a professional society, the object of which, as set forth in the constitution, was to unite in fellowship the architects of this continent and to combine their efforts so as to properly promote the artistic, scientific and practical efficiency of the profession. This resulted in a constitution adopted in February, 1857, and incorporated in March of the same year, as the American Institute of Architects. The continual and rapid growth of the requirements of civilization, the immense distance between the great business centers of the East and West, made it advisable to establish Chapters as integral portions of the Institute, and in order to compensate for these and other difficulties, the federal system of local organizations was adopted in 1867 as the best method of reaching directly the necessities of the profession throughout the country.

To-day, when the Twenty-third Convention of the American Institute of Architects meets at Cincinnati, the full force of the original intention of the founders is impressive with a great significance. The Institute and its younger brother, the Western Association, stretch out their hands in fraternal greeting, as they meet to effect the unification of the two great architectural associations of the United States and to consider the carefully prepared report of the special committee on consolidation, which has been published in advance, that each member present might bring the result of his deliberations to bear upon the discussion of the best method to accomplish the end in view.

The Institute depends upon the Chapters for its very life blood, and could not exist any more than the body without its members, if the Chapters were not alive and active. Chapters should therefore be strong in membership and earnest in work, perfecting every suggestion for the advancement of the profession, considering and furthering all educational and helpful methods, and bringing to the conventions of the Institute all matters accomplished and under consideration that may be of interest to the profession at large.

The practicing architect, from the very diversity of his duties and requirements, gains largely by constant intercourse with his confrères. The interchange of ideas and personal experience are of inestimable benefit to him, and consequently to his clients; in fact, it should be the self-protective duty of every architect to belong to one of the Chapters. I would here suggest that too often young men, fresh from study, in the fire of ambitious enthusiasm, but yet untaught by stern lessons of experience, are eager to establish new leagues, associations, societies and clubs, rather than affiliate with established institutions, and reap the profit of proved effort.

A little reflection would teach them that the older institutions have formulated those rules and regulations, those principles of art and practice, which have elevated the profession in America to its present honorable standing. That through the insistent and persistent course of the Institute, for the rights, for the dignity, and for the position of architecture as a fine art, so long ignored in this country, they have through precedents created for them, been spared some fierce contests.

Let them rather profit by the paternal care of the Institute, as their advisor and advocate, stretching forth with the strength and vigor of new inspirations to reach the ideals of its standards, taking for their underlying principle mutual assistance and cooperation in the more familiar intercourse of the Chapters.

The report of the Special Committee on Consolidation is so wisely considered and so admirably expressed that it leaves nothing for me to say, beyond words of commendation, and to

impress upon you that the earnest efforts of these gentlemen in thus providing for the merging of the two great architectural associations of our country into a common Institute is not a funeral dirge to "ring out the old and ring in the new," but a refrain, ancient as history, and strong as truth, "Union is force."

PRESIDENT CARLIN'S ADDRESS BEFORE THE WESTERN ASSOCIATION OF ARCHITECTS.

Gentlemen of the Western Association of Architects:

The position in which I find myself placed by your votes of one year ago has, among its other duties, laid upon me the responsibility of addressing you to-day, a duty which I approach with mingled feelings of pride and regret. When I think of the standing and dignity of my predecessors, a feeling of great timidity, in venturing upon the task, tempers whatever pride and enthusiasm I might have entertained, and I feel entirely unable to say what would be the most fitting words on this occasion.

I do not need to tell you that this is the last meeting of the Western Association of Architects in its present form, or to rehearse to you the causes which have contributed to the movement of which this convention is the culmination. The origin of the two bodies which meet here to-day to complete the consolidation of their interests and future usefulness, as well as the good work which they have accomplished, are matters of history, and familiar to nearly all of their members.

The work of the joint committee, composed of members from both bodies, is represented by the draft of the Constitution and By-Laws which has been accepted by the letter ballot, and which will come up for discussion and amendment before its final adoption. Although it has been thought advisable to retain the name and continue the corporate existence of the American Institute of Architects, which is known and respected in every civilized country of the globe, it has also been thought best to radically change the methods of conducting the business, and to borrow largely from the Constitution and By-Laws of the Western Association. The strictly democratic form of government which has been so successfully demonstrated in the latter, has been retained, and the new Association will be formed on an even basis, and absolutely with but one grade of membership, except that natural leveling which does not depend on the votes of any board or body, and which is free and open to all.

Neither has it been deemed advisable to provide for any system of representation, but rather to throw open the doors of our conventions to all members, on an even footing, having every one who does attend, feel that as far as to his vote and right to be heard, he is the peer to any one present, thus stimulating and encouraging the attendance instead of the reverse; and it is in a great measure to the interest felt in the attendance of our annual meetings that our influence for good in the future is to come, for we must make membership seem valuable to the average architect, or he will not desire or consummate it, and our strength lies largely in numbers and in spreading our influence over as large an area, and into as many localities and offices as possible, while the annual conventions and standard of membership should by all means be kept up to the highest point of interest and usefulness.

But it is not to the annual conventions that we must look for the greatest results of the Association in the future. For some portions we must look to the City and State Associations, who can organize and carry onward their work in the several branches, using the annual convention as a place for renewing old friendships and making new acquaintances, for viewing the works of our confrères under most favorable circumstances, but mainly for the reception of reports from the various local organizations; and for discussing and mapping out the line of policy to be pursued for the coming year.

Although we have done good work in the past, there is much that remains to be done to place architecture where it rightly belongs,—at the head of all learned and scientific professions,—and to bring it before the public in its proper light. This can only be obtained through a proper education, first of ourselves, second of the general public. We need to cultivate our relations with each other, and to establish a code of professional ethics which shall embrace the proper relations to be established, not only between the architects who may have business dealings together, but also between the architect and client, and which

shall partake of a legal statute, in so far as the duties and responsibilities of an architect extends when engaged in carrying out the orders and ideas of his employers, as to what should be expected of him in the discharge of his duties as expressed in our schedules. There is a fruitful field before us in this direction, and one which should claim our best efforts and attention.

We have before us, in the line of improving, the present system of designing our government buildings, and in this we cannot hope to accomplish the needed reform until we are able to impress upon the public mind some of the principles which should govern the carrying out of such undertakings, and bring those in authority to see the manifest advantages which would be the result of placing the designing of buildings intended for different portions of the country, and covering the widest range of materials and uses, in the hands of professional men who are constantly dealing with the same factors and conditions in their every-day work.

We should have a better understanding on the subject of competitions, and in this need the public should be brought to see the matter in a different light than the one generally accepted. In other words, we must respect ourselves, before we can expect others to respect us.

A great deal might be said in favor of a bureau of legal intelligence, which should include the best attainable talent, to be retained as a sort of district attorney for the whole association, to assist in defining and establishing the rights of the members who most stood in need of such service, and should also include the collecting and compiling of all matters of legal record pertaining to building interests; and the value of such an adjunct becomes apparent when we attempt to find a legal authority who is at all familiar with such matters.

This much of our work, and many other subjects which might be brought forward, must, if undertaken at all, be done by the National Association. The various State Associations will each have their individual interests to foster and improve, and it is largely through these that we must look for improvement in the matters of legislation. Especially will this be true of the measures designed to legalize and license the practice of the profession. One of the principal difficulties to be encountered in this direction is the fact that the general public, even including our lawyers, legislators, and members of other professions, have never given any thought to the matter, or, at most, have supposed that there was some sort of law or regulation on the subject. The investigation of the subject in the State of New York has developed the fact that the matter only needs to be brought to the attention of our public men, and before the press, to receive their hearty and unqualified endorsement and support, and it is considered probable that such a bill will be passed by the next Legislature. If every State Association will accomplish this result, it will have justified its existence.

There are other reforms (if I may be allowed the expression) which we, as a profession, stand in need of. We need better methods of testing the various materials and appliances of which our buildings are composed, and one whose endorsement should mean something more than those with which we are usually flooded, and which should stand for the professional brother as the word or letter from a well-known authority on the subjects. We also need a better plan of education for our draughtsmen than that which is within the reach of the average student in an architect's office. It is of infinitely more importance that they should be able to detail a window frame or other portion of a building in such manner as to admit of its proper construction and service, as that they could correctly compute the quantities and dimensions of a building and make complete bills of material, than that they should design a Greek god in solid bronze (made of galvanized iron) to adorn the facade of a city front, or that they should be able to construct (on paper) some of those wonderful creations which are intended to be perpetuated for all time in hemlock scantlings and shingles.

It is to the work of city Associations and individual members of the profession that we must look for the initiative in this direction. There is much which can be done by concert of action, through local committees, lectures, readings, etc., similar to the law schools which have been established in some of our cities, but the greatest field open to us in accomplishing the desired reforms, is through the medium of the press. We, as a profession, do not write and talk about the subjects with which we are most familiar. An interesting article can always be written by a person who has given his subject much thought and investigation. When the physician, chemist, or other professional student

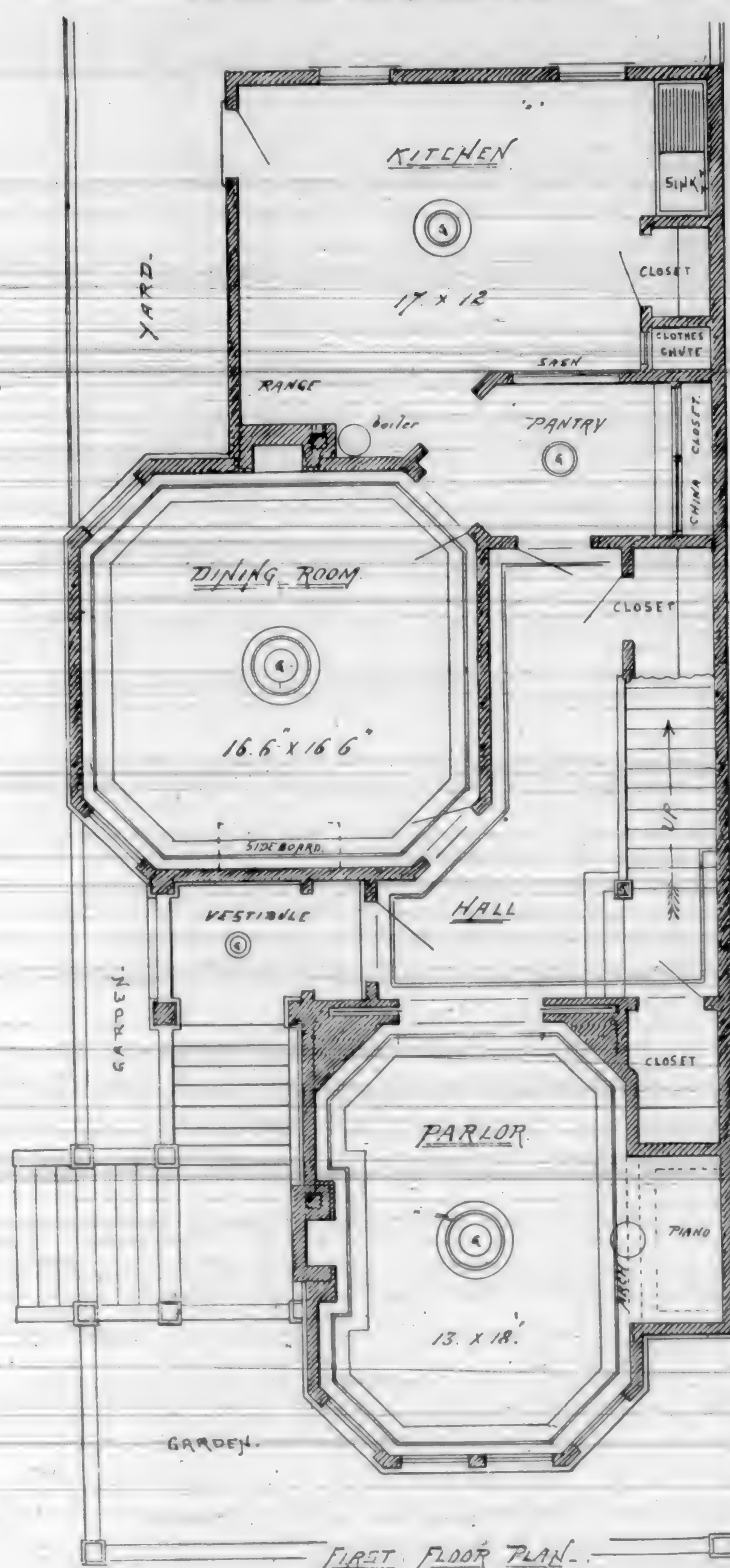


PLATE NO. 1.

makes an important discovery, or comes across anything unusual in the course of his daily practice, he at once either writes the matter up for the journals, or makes it the subject of a lecture before a class of students.

When we think that there is no more interesting subject to the average citizen than that of a building, and that outside of the publication of the exteriors and occasional plans of important or interesting buildings, often accompanied by a description written by a reporter, whose knowledge of the subject was confined to "splendid proportions", "stately magnificence", and kindred phrases, how little we are able to read on the subject that treats of the work of to-day.

Why should we not have lecture courses for the improvement of general knowledge on the subject, and to which the draughtsmen of the various localities should be especially invited, as well or better than many of the similar entertainments, so-called,

with which the halls of our cities are filled. We must take the initiative in this matter if anything is to be accomplished, and not only through the committees which may be appointed, but also through the individual work of members, either working singly or in groups, self-appointed, to carry the good work forward to a successful termination. The time and energy so spent cannot be counted lost, even though the results are not immediately apparent. The recluse who shuts himself up with his work and his books, or the man who devotes his whole thought and attention to his own special work without paying attention to what is being done around him, can never hope to attain the eminence of the man who constantly circulates among his fellows in the same line, who is as ready to give as to receive a good suggestion, for it is an additional fact that the teacher is as much benefitted as the pupil. Much more might be said in support of the theory, but this paper has already far exceeded the limits laid down.

We know that there are many among you who have thought it unwise to consummate the union between the two bodies about to be joined in wedlock, but thought that this Association was sufficient unto itself; although holding these opinions, were willing to be governed by the majority, and lend all possible assistance to the success of the plan if adopted. It is earnestly hoped that the step which has been taken will never be regretted by any of you. If the same earnestness and vigor which has characterized your work in this Association be carried forward and made a part of the new institution, The Western Association of Architects has justified its comparatively brief existence.

The American Institute of Architects, which is to be formed to-day from the members of the former bodies, is coming into existence under most auspicious circumstances, representing as it does a county rich in possibilities; in prosperous circumstances; at peace with all the world; just awakening to the fact that its cities need rebuilding on a better plan, and with more enduring materials and increased facilities for comfort and usefulness; about welcoming to its shores the representatives of all nations to inspect a World's Fair, which will, without doubt, surpass in extent and magnificence any previous undertaking, and which will be located at Buffalo, half way between New York and Chicago. The future of this Association none can tell; it is the largest and most powerful body of architects on the face of the globe; its sphere of usefulness unlimited. It seems possible for it to mould the future of the profession in this country like a mass of clay, and by taking advantage of the opportunities before it, and by profiting by the experiences of the past, the architects of the next decade might be said to have the world at their feet.

—From the Building Budget.

THE CONSOLIDATION CONVENTION AT CINCINNATI.

The consolidation of the W. A. A. with the A. I. A. was consummated on the 20th of November, Richard M. Hunt acting temporary Chairman. On the 21st the following named officers were elected. (From the American Architect and Building News.)

President, Richard M. Hunt, of New York; First Vice-president, W. W. Carlin, of Buffalo; Second Vice-president, J. W. McLaughlin, of Cincinnati; Secretary, John W. Root, of Chicago; Treasurer, S. A. Treat, of Chicago.

Directors for three years: Edward H. Kendall, of New York; Chas. A. Cummings, of Boston; Dankmar Adler, of Chicago; Henry Van Brunt, of Kansas City; Jas. G. Cutler, of Rochester; C. E. Illsley, of St. Louis; E. T. Littell, of New York; Jas. H. Windrim, of Philadelphia.

Directors for two years: R. S. Peabody, of Boston; R. W. Gibson, of New York; W. W. Clay, of Chicago; Stanford White, of New York; C. A. Coolidge, of Boston; W. H. Hayes, of Minneapolis; O. P. Hatfield, of New York; W. R. Briggs, of Bridgeport.

Directors for one year: T. P. Chandler, of Philadelphia; Adolf Cluss, of Washington; J. C. Stevens, of Portland; C. F. Schweinfurth, of Cleveland; Sydney Smith, of Omaha; G. W. Lloyd, of Detroit; W. C. Smith, of Nashville; A. C. Bruce, of Atlanta.

Building Supplement and Trade Reviews.

VOLUME 10.

DECEMBER 15, 1889.

NUMBER 12.

ANNUAL BUILDING SUMMARY.

In the following table we present the number and value of buildings erected in San Francisco during the year about to close:

FOR FIRST SIX MONTHS.						
	No.	Frame Buildings Value.	No.	Brick Buildings Value.	Additions & Repairs Value.	Total Cost.
January	47	\$195,199	2	\$76,020	23	\$163,361
February	53	233,065	5	271,831	9	27,042
March	68	308,936	2	119,403	12	24,465
April	77	345,967	5	112,818	15	53,225
May	90	396,172	2	193,457	21	58,855
June	78	557,435	2	36,210	29	54,726
Total	413	\$2,036,774	18	\$809,739	109	\$382,274
						\$3,228,787

FOR SECOND SIX MONTHS.						
	No.	Frame Buildings Value.	No.	Brick Buildings Value.	Additions & Repairs Value.	Total Cost.
July	82	\$389,788	4	\$168,235	43	\$186,936
August	88	473,592	3	94,770	17	82,337
September	63	306,003	3	228,815	7	20,977
October	91	446,892	4	381,710	8	13,592
November	71	359,345	1	32,300	12	45,774
December	33	182,247	3	297,760	8	28,965
Total	428	\$2,157,867	18	\$1,203,590	95	\$373,581
						\$3,735,038
Grand Total	841	\$4,194,641	36	\$2,073,329	204	\$755,855
						\$6,963,825

This statement has been made up from the files of the ARCHITECT and we should bear in mind that in addition to this, there must have been many improvements not noted through the records. We should estimate such improvements at not less than \$500,000 in the whole city, making a grand total of say, \$7,500,000 for the year, being in excess of even 1885 in the value, though far behind in the number of the buildings.

We will give the total values and numbers from 1880 so that our readers may make a comparison:

1880—	397 engagements, value	\$1,754,435
1881—	533 "	3,790,732
1882—	785 "	3,896,212
1883—	808 "	5,261,689
1884—	1,127 "	6,202,807
1885—	1,457 "	7,043,999
1886—	1,148 "	6,401,669
1887—	1,093 "	6,005,054
1888—	891 "	6,244,220

NOTICE TO CONTRACTORS.

Sealed proposals will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 2 o'clock P. M., on the 16th day of January, 1890, for all the labor and materials required to construct and complete the wharf, boat-house, barracks, hospital, disinfecting apparatus, etc., for the United States Quarantine Station, Angel Island, San Francisco, Cal., in accordance with the drawings and specifications, copies of which may be had on application at this office and the office of Surgeon P. H. Bailhache, United States Marine Hospital Service, San Francisco, Cal. Each bid must be accompanied by a certified check for \$500.

The Department will reject all bids received after the time fixed for opening the same; also, bids which do not comply strictly with all the requirements of this invitation.

JAS. H. WINDRIM,
Supervising Architect.

December 5, 1889.

REVIEWS.

N. W. AYERS & SONS' AMERICAN NEWSPAPER ANNUAL FOR 1889 has been laid upon our table full of a carefully prepared list of all newspapers and periodicals published in the United States and Canada.

It enumerates the various press and editorial associations and their officers, contains a list of all newspapers inserting advertisements, and a complete list of all the religious, agricultural, medical, commercial, scientific, educational, and other class publications.

It gives the population of every state, territory, county and county-seat, city and town, it gives the number of votes polled in each state, territory and county by either of the parties, and on the whole is an exhaustive work worth every dime of its cost to any advertiser of note, and full of valuable information to all. Price \$5.00, carriage paid.

WOODLAND.

Tenth Annual Report of Building and Improvements in Woodland and Yolo County, summarizing the kind, number and cost of the various structures for the last twelve months, as furnished the "ARCHITECT," by Gilbert & Sons of Woodland.

Summary for 1889.		Woodland City.		Yolo County.	
Description of Improvements and Investments.	No.	Value.	No.	Value.	
Frame Dwellings	31	\$68,350	27	\$32,550	
Brick Dwellings	4	6,500	—	—	
Frame and Brick Additions and Improvements	16	22,380	3	1,600	
Frame Stores and Hotels	4	—	4	10,000	
Brick Stores and Hotels	14	22,500	5	57,500	
Brick Hotels	2	—	2	50,000	
Frame Barns and Carriage Houses	18	15,050	26	28,350	
Frame Warehouses and Storage Buildings	3	1,213	6	9,250	
Iron Warehouses and Storage Buildings	3	3,000	2	2,000	
Buildings for Manufacturing purposes	7	19,250	1	1,500	
School Houses and Public Buildings	2	16,735	1	1,122	
Water Works, Wind Mills & Irrigating Estab.	3	3,000	7	11,200	
Raisin Dryers and Packing Houses	2	1,200	—	—	
New Bridges, Improvements and R. R. Buildings	—	—	3	63,750	
Total No. and Value for City and County	103	\$179,178	89	\$268,822	

Woodland and suburbs have contributed to the above one hundred and three buildings and improvements, valued at \$179-178; Yolo County, eighty-nine, valued at \$268,822, making a final aggregate for City and County of one hundred and ninety-two buildings and improvements, estimated value at \$448,000.

Below we give the figures for the previous nine years.

Year.	No. of Engagements.	Aggregate Value.	Average Value.	Largest Single Engagement.	No. Buildings in progress at close year.
1880	54	\$126,730	\$2,346	\$28,000	2
1881	59	140,640	2,382	34,580	4
1882	71	169,950	2,393	15,500	1
1883	84	204,519	2,434	52,000	7
1884	133	359,594	2,702	28,000	5
1885	224	606,182	2,461	25,000	11
1886	172	280,555	1,953	22,000	10
1887	92	203,116	2,208	30,000	9
1888	134	392,355	2,928	50,000	14
Total	1,023	\$2,483,685	\$2,423		

The architects, contractors and all interested in the building trade are invited to send building information from the section of the country they represent. We report all the recorded building news of San Francisco and Alameda counties, and for the future intend to make a thorough report from every town on the coast and interior. The index for 1889 will be out in January.

Binders for temporary use can be obtained at this office, not only for the CALIFORNIA ARCHITECT, but any other journal. For prices see our advertisement on page XI.

Our book trade is enormous. Order through us.

CITY BUILDING NEWS.

Army and Castro. 1-story frame; owner, E. A. Anthony; architect, T. J. Welsh; contractor, R. Doyle & Son; cost, \$2,294; signed, Nov. 13; filed, Nov. 14; payments, \$500; brown coated; \$500, completed; \$750, 35 days.

Broderick and Eddy. 2-story cottage; owner, Adolph Meyer; architects, John and Balcynski; cost, \$2,550; signed, Nov. 13; filed, Nov. 14; payments, \$700; framed; \$750, rough mortar on; \$700, ready to paint inside; \$700, 35 days.

Bryant, Nos. 855 and 861. Brick underpinning, 4-story frame; owner, H. Royer; architect, R. Zimmerman; contractors, Berman & Flading; cost, \$1,000; signed, Dec. 5; filed, Dec. 7; payments, \$110, brick work done; \$110, accepted; \$270, 35 days.

Bryant and Fillmore. Alterations; time, Feb. 1, 1890; owner, M. Leavitt; architects, Wright & Sanders; contractors, Farrell & Bell; signed, Nov. 26; filed, Dec. 5; cost, \$1,310; 75 per cent. as work progresses; balance, 35 days.

Broderick and Jackson. To build; owner, Julia L. Marie; architect, M. G. Buglee; contractor, R. O. Chandler; cost, \$2,300; signed and filed, Nov. 12; payments, \$600; enclosed; \$600, brown coated; \$600 accepted; \$500, 35 days.

Bartlett between 22nd and 23rd. Building; owner, Emanuel Baptist Church; architect Chas. Geddes; contractor, Wm. Linden; surety, W. A. Moser; cost, \$17,000; signed, Nov. 8; filed, Nov. 12; time, June 15, 1890; payments, \$1,000, frame to 1st floor; \$1,750, roof boarded; \$2,000, ready for lathing; \$3,000, windows in; \$3,000, paint on outside; \$2,000, completed; \$1,250, 35 days.

Ellis and Gough. Improvements, cottage; owner, J. J. Lauer; architects, C. R. & J. M. Wilson; contractors, Joseph Kemp & Co.; cost, \$3,340; signed, Nov. 15; payments, 75 per cent. as work progresses; balance, 35 days after completion.

Everett near Third. 2-story frame and 2-story rear frame; owner, Eliza Bunn; architects, Townsend and Wyneken; contractor, J. W. Wissinger; cost, \$10,900; signed, Nov. 23; filed, Nov. 25; payments, \$2,750, roof thinned; \$2,000, brown coated; \$2,000, sash hung; \$2,000, completed; \$2,750, 35 days.

Ellis near Leavenworth. Excavating and grading; owner, Johann A. Schmidt; architect, Julius E. Kraft; contractors, Frank Simonart, et al.; sureties, E. Hiettinger and James McEwen; cost, \$1,040; signed, Nov. 22; filed, Nov. 25; time, March 1, '90; payments, \$300, 75 done; \$400, completed; \$260, 35 days.

Ellis and Gough. Painting; owner, Jos. Kemp & Co.; architects, C. R. & J. M. Wilson; contractors, Friesen & Koebe; cost, \$1,250; signed, Nov. 19; filed, Nov. 20; payments, 75 per cent. as work progresses; balance, 35 days completed.

Fulton near Lyon. 2-story frame; owner and architect, Ernst Klein; contractor, J. A. Ehmman; sureties, A. D. Klein, C. Rohrbach and F. Kronenberg; cost, \$4,500; signed, Nov. 7; filed, Nov. 14; payments, \$1,200, brown coated; \$1,200, hard finish; \$1,200, completed; \$1,200, 35 days.

Fell and Steiner. 15 days; owner, James Scobie; architect, Geo. H. Miller; contractor, Wm. Dunbar; signed and filed, Dec. 3; cost, \$920; payments, \$500, basement and cellar walls done; \$420, completed.

Fulton and Park. 2-story frame; owner, J. Dollard; architect, M. J. Welsh; contractor, R. O. Davis; cost, \$2,200; signed, Dec. 3; filed, Dec. 5; payments, \$375, framed; \$575, brown mortar on; \$575, completed; balance, 35 days.

Folsom and Seventh. Alterations; owner, Eugene Mercier; architect, Emile Depierre; contractor, J. J. Dunn; sureties, C. S. Holmes and F. Jost, \$2,000; cost, \$3,525; signed and filed, Nov. 26; payments, 75 per cent. as work progresses; balance, 35 days accepted.

Folsom and Eleventh. 3-story frame; owner, James Scobie; architect, Geo. H. Miller; contractor, William May; sureties, E. McCann and Wm. Dunbar; cost, \$2,450; signed, Nov. 19; filed, Nov. 21; time, 90 days; payments, 75 per cent. as work progresses; balance, 35 days.

Guerrero and Seventeenth. 2-story frame; owner, Fannie A. Gunn; architect, A. J. Barnett; contractor, A. Jack-son; surety, Chas. F. Doe, \$2,000; signed, Nov. 12; filed, Nov. 13; cost, \$4,126; time, 90 days; payments, \$994, roof boards on; \$700, brown coated; \$700, white coated; \$700, completed; \$1,082, 35 days.

Golden Gate Park. Stable; owner, Golden Gate Park Co.; architects, Percy & Hamilton; contractors, J. G. and T. N. Day; time, 30 days; cost, \$3,975; signed, Nov. 15; filed, Nov. 20; payments, 75 per cent. as work progresses; balance, 35 days.

Geary and Broderick. Alterations; owner, Walter D. Scott; architect, M. J. Welsh; contractors, Ivory Wells, et al.; cost, \$3,800; signed and filed, Nov. 21; payments, \$550, framed; \$550, brown coated; \$550, completed; \$550, 35 days.

Hollis near Ellis. To build; owner, W. F. Peabody; architects, Ashton & Stone; contractor, Ira Fancher; cost, \$1,066; signed, Nov. 11; filed, Nov. 26; payments, 25 per cent. framed; 25 per cent. closed; balance, completed.

Howard and Seventeenth. 2-story frame; owner, M. Balcynski; architects, John & Balcynski; contractors, Schutt & Kreeker; cost, \$1,500; signed and filed, Nov. 21; payments, \$1,125, roof on; \$1,125, enclosed; \$1,125, accepted; \$1,125, 35 days.

Wason and Ellis. Building; owner, Mrs. E. H. Conly; architect, John Gash; contractor, J. Oak; signed and filed, Nov. 16; cost, \$26,350; payments, \$5,000, brick work done; \$5,000, brown coated; \$5,000, white coated; \$5,137.50, completed; \$4,712.50, 35 days.

Market near Fourth. Plastering, etc.; owner, Cal. Acad. Sciences; architects, Percy & Hamilton; contractor, Chas. Dunlap; L. E. Wyneken and James Treadwell; sureties for \$10,000; cost, \$19,400; signed, Nov. 5; filed, Nov. 19; time, 2 months after roof is on; payments, 75 per cent. as work progresses, first Monday of each month; balance, 35 days.

Montgomery Avenue, Nos. 513-515-517. Alterations and improvements; running through to improvements on Green street; Mrs. Strauss; owner, James E. Wolfe; architect, L. D. Fichette; contractor; cost about, \$1,200; days work.

Mission and First. Wrought iron work for 5-story brick; owner, T. H. Day; architect, P. R. Schmidt; contractors, O'Connell & Lewis; cost, \$3,762; signed, Oct. 8; filed, Nov. 21; time, 60 days; payments, 75 per cent. as work progresses; balance, 35 days; Cast iron work; contractors, Sims & Morris; payments, same; time, 40 days; cost, \$3,288.

McAllister and Larkin. Stone, brick, and carpenter work; owner, J. P. Hale; architect, T. J. Welsh; contractor, J. G. and T. N. Day; sureties, B. Jost and J. H. Kennedy; \$50,000; time, Sept. 30, 1890; cost, \$158,500; signed, Nov. 21; filed, Nov. 23; payments, monthly, 75 per cent. as work progresses; balance, 35 days.

Natoma and Howard Court. Eight tenement houses; owner, John H. Boyd; architect, B. McDaniel & Son; contractor, John H. McKay; cost, \$12,469; signed, Nov. 21; filed, Nov. 22; payments, \$2,400, roofs on; \$3,200, brown coated; \$3,669, completed; \$3,251, 35 days.

Octavia and O'Farrell. Painting; owner, J. Boas; architects, Salfield & Kohlberg; contractors, M. Cohen & Co.; cost, \$320; signed, Nov. 13; payments, \$100, 15; \$200, primed; \$500, completed; \$236, 35 days; glazing, contractor, Morris Zacharias, cost, \$775; payments, \$350, white glass set; \$425 accepted; plastering, C. C. Morabourne; cost, \$1,450; signed, Nov. 13; payments, \$1,450, brown coated; \$400 accepted; \$100, 35 days; plumbing, Sam'l Lickelheimer & Bro., contractors; cost, \$1,000; payments, \$400, rough work in; \$550, completed; \$200, 35 days; carpenter work, W. Plume, contractor; cost, \$11,450; sureties, David Woerner and F. Jost, \$10,000; payments, \$2,000, enclosed; \$2,000, partitions, etc.; \$2,000, ready to paint; \$2,000, completed; \$2,000, 35 days; brick work, Valdemar Tarp, contractor; sureties, Sacramento Transfer Co. and E. L. Snell, \$1,804; cost, \$1,804; payments, \$300, excavation done; \$300, bulkheads done; \$894 accepted.

Oak and Broderick. 2-story frame; owner, Elizabeth F. Lord; architect, W. H. Armitage; contractor, O. E. White; sureties, Frank P. Latson and L. P. Lewis, \$3,000; signed, Nov. 23; filed, Nov. 25; cost, \$6,777; time, 30 days; payments, \$1,800, roof on; \$1,482, white coated; \$1,800, completed; \$1,695, 35 days.

O'Farrell, between Mason and Powell. 4-story basement building; owner, H. W. Heath; architect and contractor, J. Gash; cost, \$16,141; signed and filed, Nov. 16; payments, \$2,000, brick work done; \$2,000, brown coated; \$2,000, white coated; \$2,000, doors and windows hung; \$2,000, outside finish on; \$2,105, completed; \$4,036, 35 days.

Pine and Kearney. 3-story basement, brick; owner, S. P. Blumenthal; architect, Fred E. Wilcox; contractor, Geo. W. Spencer; cost, \$5,200; signed and filed, Nov. 13; payments, \$500, concrete footing in; \$600, ready for 1st story joists; \$400, sidewalk arches completed; \$700, ready for 2nd story joists; \$700, ready for 3rd; \$1,000, completed; \$1,300, 35 days.

Pine No. 2906. Time, March 15, 1890; owner, Mary Sexton; architect, W. H. Sorrell; contractor, W. H. Der-vorth; sureties, James Young & A. W. Sorrell, \$7,000; cost, \$7,000; filed, Dec. 3; payments: \$1,400, foundation done; \$1,400, framed; \$1,400, first cost mortar on; \$1,400, second cost on; \$1,400, completed.

Pine near Kearny. Rebuild wall; owners, Kong Chow Association; surety, J. F. Kennedy; contractor, G. W. Spencer; cost, \$1,500; time 30 days, filed, Dec. 2.

Ridley and Guerrero. Time, 60 days; owner, Frederick Pretorius; architect, W. Winterhalter; sureties, A. Hindrichs & B. Stampf; cost, \$2,832; payments, \$800, floor laid; \$600, rough coat plastering done; \$700, completed; \$752, 35 days; signed, Nov. 3; filed, Dec. 4.

Sacramento and Drumm. Piling, capping, etc.; owner Mahony Bros.; architects, Ashton & Stone; contractor, J. P. Sheldon; cost, \$27 per piler; signed, Nov. 15; filed, Nov. 25; payments, 75 per cent. as work progresses; balance, 35 days after completion.

Sutter and Taylor. 3-story frame; owner, Isabella Levy; architects, Kenitzer & Kollofrath; contractors, C. F. Ruppel; sureties, Ch. Helwig and W. Mische, \$6,000; signed, Nov. 5; filed, Nov. 6; cost, \$11,168; payments, \$1,500, framed; \$2,300, roof enclosed; \$1,500, first cost plaster on; \$1,500, plastered; \$1,575, completed; \$2,790, 35 days; time, 110 days.

Sutter and Taylor. 3-story frame; owner, W. H. Williams; architects, Kenitzer & Kollofrath; cost, \$1,094; signed and filed, Dec. 7; payments, \$450, brick foundation, walls up; \$374, brick work done; \$270, 35 days.

Stockton and Vallejo. Basement, walls, chimneys, etc.; owner, R. R. Hind; architects, Ashton & Stone; contractor, Crawford Ferris; cost, \$3,600; signed, Nov. 11; filed, Nov. 26; payments, 75 per cent. as work progresses.

Spofford and Washington. Alterations; owner, Wong Loy Yee; architect, A. J. Barnett; contractors, H. T. Bray, et al.; sureties, Thos. Flynn and J. J. Sullivan, \$1,000; cost, \$2,363; time, 45 days; signed, Nov. 12; filed, Nov. 26; payments, 75 per cent. as work progresses, first and third Mondays of month; balance, 35 days completed.

Shotwell and Twenty-fourth. 2-story frame; owner, John Hiller; contractor, Bernard Dreyer; cost, \$7,600; time, 105 days; signed, Nov. 18; filed, Nov. 26; payments, \$1,900, framed; \$1,900, brown coated; \$1,900, white coated; \$1,900, 35 days.

Taylor near O'Farrell. 4-story building; owner, Mrs. E. H. Conly; architect, John Gash; contractor, L. Cohane; cost, \$36,556; signed and filed, Nov. 16; payments, \$7,000, brick work done; \$7,000, brown coat on; \$7,000, white coated; \$6,417, completed; \$9,139, 35 days.

Taylor near O'Farrell. 4-story building; owner, Mrs. E. H. Conly; architect, John Gash; contractor, L. Cohane; signed and filed, Nov. 16; cost, \$33,530; payments, \$6,000; brick work done; \$5,000, brown coat on; \$5,000, white coat on; \$7,462.50, completed; \$8,487.50, 35 days.

Turk and Laguna. 3-story flat; owner, A. Legallet; architect, T. J. Welsh; contractor, James C. Bassett; cost, \$15,500; signed, Nov. 22; filed, Nov. 23; payments, \$1,937, foundation in; \$1,937, frame up; \$1,937, frame enclosed; \$1,937, brown coated; \$1,937, white coated; \$1,940, completed; \$5,875, 35 days.

Union, No. 907. Alterations; owner, W. J. Hermann; architect, Geo. H. Miller; sureties, Vennscheke Bros. and H. Fielden; contractors, Henry Jensen; cost, \$2,900; signed and filed, Nov. 25; payments, \$600, framed; \$500, stairs up; \$325, window frames in; \$550, completed; \$725, 25 days.

Vallejo and Van Ness Ave. 2-story frame; owner, Rose Wangerheim; architects, Huene & Everett; contractor, James Campbell; cost, \$5,774; sureties, A. W. Starbird and G. W. Goldstone, \$5,000; signed, Nov. 12; filed, Nov. 14; payments, \$1,443.50, sheathed; \$1,443.50, brown coated; \$1,443.50, completed; \$1,443.50, 35 days.

Valparaiso and Taylor. 2-story frame; owner, Catherine Peter; architect, Wm. Schrof; contractor, Albert Norton; surety, Fabian Jost; cost, \$2,400; signed and filed, Dec. 2; payments, \$600, roof on; \$600, outside finish on; \$600, first cost paint on; \$600, 35 days.

Van Ness and Post. Electrical works; owner, Concordia Club; architect, J. H. Littlefield; contractor, Cal. Electrical Works; sureties, F. C. Stover and J. R. Sprink; cost, \$2,084; payments, 75 per cent. as work progresses; balance, 35 days.

Waverly Place near Sacramento. Lathing and plastering; 4-story brick; owner, Jos. Goetz; architect, T. J. Welsh; signed, Nov. 16; filed, Nov. 22; contractor, Thos. Winter; cost, \$3,370; payments, 75 per cent. as work progresses.

Washington and Walnut. 2-story dwelling; owner, J. T. Rogers; architect, Geo. A. Bondwell; contractor, L. C. Jenkins; cost, \$3,039; signed, Nov. 12; filed, Nov. 13; payments, \$1,000, roof on; \$87.12½, plaster done; \$887.12½, completed; \$924.75, 35 days.

3-story building. owner, H. W. Heath; architect, John Gash; contractor, J. Oak; cost, \$16,141; signed and filed, Nov. 16; payments, \$2,000, brick work done; \$2,000, brown coated; \$2,000, white coated; \$2,000, windows hung; \$2,000, outside finish complete; \$2,105, completed; \$4,036, 35 days.

SAN JOSE.

Addition to schoolhouse on Santa Clara street. Contractor, J. D. Stewart; cost, \$5,451; time, Feb. 1, 1890.

W. S. Boyles to erect for Charles M. Schiele, on Schiele avenue, near Stockton avenue, on or before Feb. 1, 1890, a six-room cottage for \$1,500.

J. D. Stewart to erect a two-story brick building for A. Vatonne, on Market street, between Santa Clara and St. John, on or before Feb. 15, 1890, for \$2,697.

J. S. Wheeler to erect for Mr. and Mrs. Lewis Schoen, on South Fifth street, near Santa Clara, a two-story eight-room house, to cost \$1,690; time, March 20, 1890.

Wilcox & Scott to build for Mrs. Adele Lefranc, cor. Market and Balbach streets, a cottage to cost \$1,160, to be completed on or before Jan. 5, 1890.

LOS ANGELES.

B. P. Hutchinson, dwelling. Shaw street, east of Main street, \$1,000.

Frank E. Walsh, dwelling. Adams street, between Maple and Main streets, \$2,000.

Mrs. F. C. Howe, dwelling. Lot 2, block 61, Hancock survey, \$500.

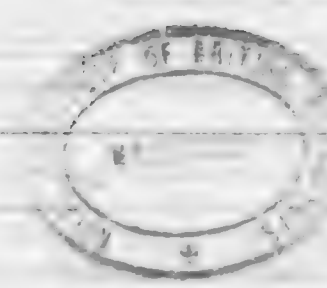
Mrs. E. T. McGinnis, dwelling. Lot 8, Longstreet tract, \$5,000.

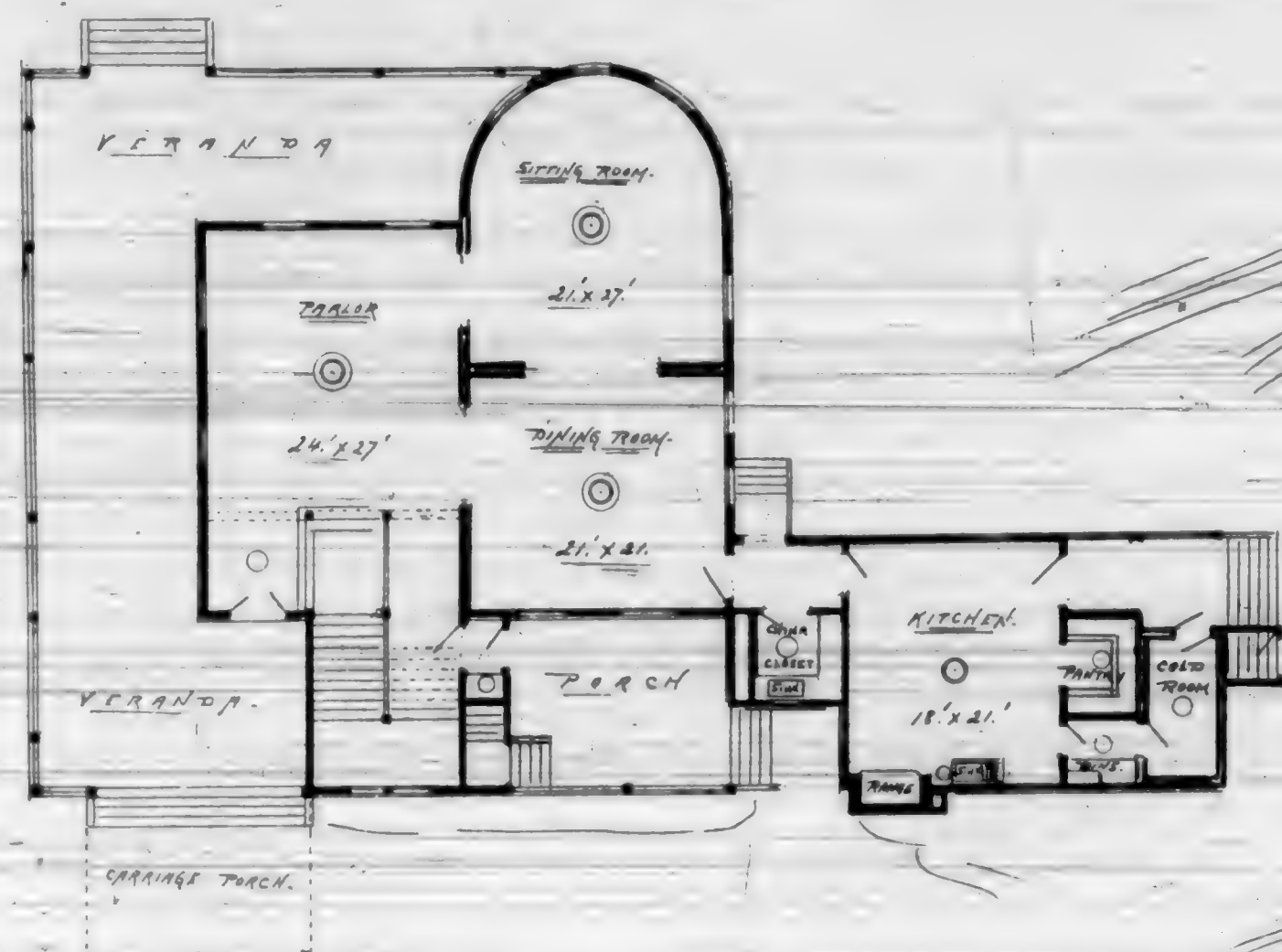
Lindley & Jones, market and armory. Fort street, between Sixth and Seventh, \$60,000.

C. B. Woodhead, stable. Between Buena Vista and Upper Main streets, \$300.

E. W. J. Scott, dwelling. Whittier street, between Ninth and Lincoln streets, \$1,900.

Emma Philager, stable. No. 8 Lincoln street, \$100.





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ARCHITECTS.



December 15, 1889]

THE CALIFORNIA ARCHITECT AND BUILDING NEWS.

Me Wo. store. No. 10 Juan street, \$850.
M. P. Beck, dwelling. Corner Eleventh and Sentous, \$300.
Ole Hall, dwelling. Kelley street, \$660.
Edward Hildreth, stable. No. 245 South Hope street, \$675.
Total, \$72,435.
Fred Hanfman, dwelling. Adams street, between Main and Grand avenue, \$2,500.
W. W. Holcom, dwelling. Rodney street, between Los Angeles and Main streets, \$300.
Dennis Henness, store. No. 609 Grand avenue, \$1,200.
Guadalupe Perez and others, brick store. Spring street, between Second and Third streets, \$10,000.
William Wright, dwelling. Flower street, near Washington street, \$2,500.
S. M. Cool, stores and dwelling. Corner Jefferson and Wesley avenues, \$6,375.
M. J. Rich, dwelling. Workman street, near Downey avenue, \$300.
E. Pinney, dwelling. Corner Mignonette and Beaudry streets, \$800.
P. H. Bodkin, dwelling. Corner Adams and Trinity streets, \$1,000.
J. S. Sheller, dwelling. Eleventh street, between Main and Hill streets, \$5,000.
Orphans Home. Boyle Heights, \$117,030.
J. Thompson, addition to store. No. 26 East First street, \$30.
M. A. Whissen, repairs to residence. No. 339 Figueroa street, \$500.
John Schurer, dwelling. No. 515 Macy street, \$2,500.
Aggregate value of improvements, \$223,500.

ALHAMBRA. (Los Angeles.)

Two new frames are being erected.

LIVERMORE.

Mr. J. Johnson is building an addition, 20x30 feet, to his hotel property, on Main street.
Newton Gray is building an addition to his residence, cor. Fourth and K streets.

STOCKTON.

Residence. N. C. Hilke, owner, cost, \$3,000. Public school, cost, \$15,000. Store, owner, Dr. Walter Todd, cost, \$10,000. Residence, owner, Alex. Galt, cost, \$3,500. Residence, owner, Frank Berwick, cost, \$28,000. Building, owner, Chas. Christian, cost, \$30,000. Residence, owner, Wm. Smith, cost, \$4,000. Architect, Chas. Beasley.

MERCED.

Residence. Owner, J. K. Laws, cost, \$8,000; architect, Chas. Beasley.

OAKDALE.

Hotel, John Hubble, owner, cost, \$10,000. Residence, owner, A. T. Stewart, cost, \$35,000. Architect, Chas. Beasley.

EUREKA.

First Congregational church. Cost of church, without seating, or heating furnaces, \$13,000; architect, James E. Wolfe.

SAN LEANDRO.

Hayward Avenue. Two dwellings: owner, Mrs. J. G. Hall; contractors, Quigley & Kilgore; time, Jan. 15, '90; cost, \$3,400; signed, Nov. 16; filed, Nov. 20; payments, \$1,000, materials on ground; \$1,000, foundation done; \$550, plastering done; \$850, 35 days.

KLINKNERVILLE.

Idaho and Butler. 1-story cottage: owner, C. A. Klinkner; architects, J. J. and T. D. Newsom; contractors, Sturgeon & Son; cost, \$3,600; signed, Dec. 5; filed, Dec. 7; payments, \$140, frame up, roof on; \$140, shingled, rustic and chimney built; \$440, rough plumbing done, brown mortared and first coat of paint outside; \$440, plastered and second coat of paint; \$940, completed; \$900, 35 days.

ALAMEDA.

Para near San Antonio Avenue. 2-story frame: owner, Albert Vickers; contractor, A. R. Denke; cost, \$3,800; signed, Nov. 27; filed, Dec. 4; payments, \$800, frame up; \$1,000, first coat of plaster on; \$1,000, finished; \$1,000, 35 days.

OAKLAND.

Twenty-sixth Avenue, between East Ninth and Tenth streets. 2-story frame: owner, C. B. Rice; contractor, Wm. F. Wise; cost, \$2,000; signed, Oct. 28; filed, Nov. 21; time, Jan., '90; payments, \$50 monthly; balance, mortgage.

Washington and Twelfth. Lathing brick building: owner, M. K. Blake; architect, W. J. Matthews; contractors, Bradley & Sturrock; cost, \$1,600; signed, Nov. 20; filed, Nov. 22; payments, \$1,000, lathed; \$1,000, brown coated; \$1,450, white coated; \$1,150, 35 days.

Piedmont. Painting: owner, C. W. Randall; architect, Chas. Mau; contractors, Sloan & Brown; signed and filed, Nov. 18; cost, \$350; quarterly payments, ending 35 days after completion; interior painting; contractors, Dooly & Hooley; signed and filed, Nov. 20; cost, \$600; payments, one-fourth, varnish on; one-half, completed; balance, 35 days.

Bray Tract, Brooklyn Tp. Dwelling: owner, P. H. Blake; architect, S. Hatfield; contractors, A. B. Moody & O. F. Hunt; cost, \$1,700; signed, Nov. 29; filed, Nov. 30; payments, \$318.75, shingled; same, window frames set; same, plastering done; same, completed; \$428, 35 days.

Block 45, Clinton. Frame: owner, B. J. Richter; contractors, Deike & Enos; cost, \$2,112.50; signed, Nov. 4; filed, Nov. 25; time, Feb., '90; payments, one-third, enclosed; one-third, first coat of plaster on; one-third, completed.

Market and Fourteenth. Additions: owner, W. S. Pogue; architect, Wm. Kirk; sureties, A. Wood and Mrs. C. E. Clement; cost, \$2,000; contractor, E. S. Fisher; cost, \$3,088.50; signed, Nov. 11; filed, Nov. 26; payments, 75 per cent. as work progresses.

Leonard Tract. Lot 6, block B: owner, Mrs. Margaret Dunn; contractors, Higgins, Davidson & Co.; cost, \$2,425; signed, Nov. 23; filed, Nov. 26; payments, \$600.25, frame up; same, enclosed and shingled; same, brown mortared; same, 35 days completed; time, 12 weeks.

PLEASANTON.

Extensive repairs are being made on the residence of Count Valensin.

MISSION. (San Jose.)

P. McKenna is building a large twelve-roomed house on his ranch, near Mission Peak. T. H. Downie is the contractor.

GOLDEN GATE.

G. Paladeau will build a house at a cost of \$3,500.

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Artisan, Riddell.....5.00
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Lessons in Carpentry by Slide Rule, Riddell.....3.00
Modern Low Cost Houses, Shoppell.....50
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Steam Engine Catechism, Grimshaw.....1.00
Supplement to Saws, Grimshaw.....1.00
Grimshaw on Saws, Grimshaw.....4.06
Principle of House Drainage, Putnam.....1.00
Drawing for Stone Mason, Davidson.....1.50
Practical Prospective, Davidson.....1.50
Cutting Tools, Smith.....1.50
Sewer Gas and Its Dangers, Brown.....1.25
Lumberman's Handbook, Judson.....2.00
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tion to this journal for one year, if sent direct to this office, will entitle the subscriber to a rebate of \$1.00 on any one of these works.

ANY book not on above list we can supply at regular rates.

A perfect model of the "Monarch" Bear has been presented to our Editor by R. Schmid, the sculptor, studio 17 Ridley St. It is a remarkable figure as it quietly lies on our table in plastic form and though labelled the "Monarch," we "bar" in mind there is no harm in it.

THE NORRIS PULLEY.

The desire to draw the attention of our many subscribers to the advertisement of the Norris Pulley page V.

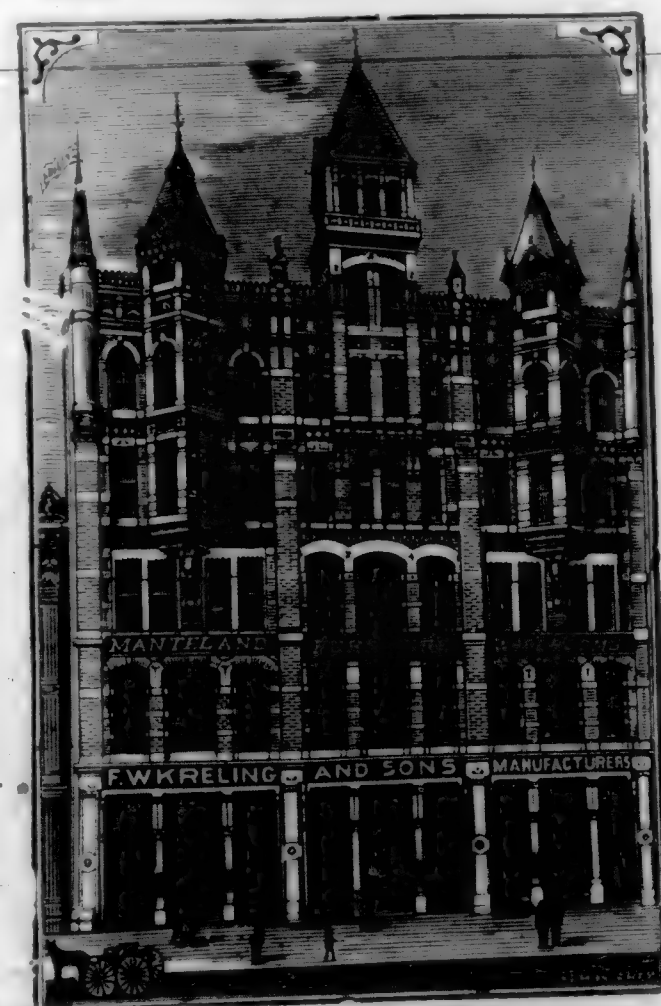
The Pulley you can readily see is the only pulley made that does not depend upon the screws to hold it in the frame. The pin being back of the bevel on lower end of Pulley causes the weight of both sash and weight to pull back, therefore the more weight the more firmly the pulley imbeds itself in the frame.

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In the last few years the majority of the fine buildings erected have the Norris Pulley in the frames. The architects and builders generally concede that the Norris Pulley is the best on the market, their pulleys range in price from 15 cents to \$60 per dozen, and they make pulleys with 3/4-in. to 4-in. wheels. All their pulleys are numbered, and as the number designates the size and quality, always in ordering mention the number.

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Architects wishing catalogues and samples will receive same free of cost.



CABOT'S BRICK PRESERVATIVE.

The sandstone in the New California Theatre building has been treated to a coat of Cabot's Brick Preservative, which has water-proofed and hardened the stone. While it does not appear to have changed the natural color of the stone any more than water would, it leaves no trace of gloss or gum.

Retail Price List of Lumber.

PINE, FIR AND SPRUCE.

	Per 1,000 ft.
Rough Pine, m'cantable to 40 ft. inclusive.	\$20 00
" " 41 to 50 " "	21 00
" " 51 to 60 " "	23 00
" " 61 to 70 " "	27 00
" " 1x3, fencing.	22 00
" " 1x4, "	21 00
" " 1x3, 1x4 and 1x6, odd lengths.	19 00
" " second quality.	17 00
" " selected.	25 00
" " clear except for flooring.	31 00
" " for flooring less than flooring.	1 00
Clear V.G. No. 1 Flooring, when ordered, extra.	5 00
Fire Wood.	11 00
Dressed Pine, flooring, No. 1, 1x6.	32 00
" " 1x4.	34 00
" " 1 1/2 x 4, 1 1/2 x 6 and odd sizes.	37 00
" " all sizes, No. 2.	27 00
" " Stepping, No. 1.	43 00
" " 2.	33 00
Ship Timber & P'd., rough selected.	27 00
" " select'd plnd, 1 sd.	29 00
" " 2 " 40 ft.	31 00
" " 3 " "	33 50
" " 4 " "	35 00
Deck Plank, rough.	35 00
" " dressed, average 35 feet.	40 00
Pickets, rough, B. M.	20 00
" " 1x1 1/2 " 4 ft. long.	5 00
" " 1x1 1/2 " 4 1/2 ft. long.	6 00
" " 1x1 1/2 " 5 ft. long.	7 00
" " 1x1 1/2 " 6 ft. long.	8 50
" " 1x1 1/2 " 7 ft. long.	10 00
" " 1x1 1/2 " 8 ft. long.	11 50
Furring, 1x2.	1 00
Lath, 1 1/2 x 4 ft.	2 75
" " 1 1/2 x 4 ft.	3 00
Spruce, rough.	19 00
" " dressed, shelving.	36 00
" " 1 inch.	36 00
" " clear.	33 00
Rough damage, delivered.	20 00

REDWOOD.

Rough Redwood, merchantable.	19 00
" " second quality.	16 00
" " selected.	25 00
" " clear.	34 00

merchantable boards.	21 00
1 inch surfaced.	31 00
No. 1 do.	34 00
No. 2 do.	25 00
T & G, 1x6, 12 ft. and over, No. 1.	34 00
" other sizes, No. 1.	37 50
" 7 to 11, No. 1.	25 00
" under 7 " "	22 00
Rustic, No. 1.	35 00
" 2.	31 00
T & G b'ded 12 ft. and over, No. 1.	34 00
" other sizes, No. 1.	37 50
" 7 to 11, " "	25 00
" under 7 " "	22 00
Sliding, 1 inch.	25 00
Casing Stock, 1, 1 1/2 and 1 3/4 Rough, 7 to 11.	25 00
1x3, 4x6, Clear, under 7.	22 00
Tank Stock, 2 and 3 inches, clear, (surfaced or rough,) under 12 feet.	27 00
Pickets, (fancy), 4 ft., B. M.	25 00
" (rough, pointed), B. M.	18 00
" (square), B. M.	16 00
Battens, 1x3, per lineal ft.	01
Shingles, per M.	2 25
" fancy.	3 50
Posts, split.	15
Shakes, split.	11 00
" sawed.	13 00

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SAN FRANCISCO, CAL.

Mr. Bloor received a complimentary vote of twenty-two for the office of Secretary, and the convention also offered to him and to Mr. Hatfield votes of thanks for the faithful and disinterested manner in which they had so long discharged the duties of Secretary and Treasurer of the original Institute.

The committee, which had had in charge the consideration of the important question of the employment of a clerk-of-works, was continued and enlarged, and instructed to report at the next convention.

A new committee was appointed to consider how the members of State Associations and Chapters, who were not already members of the Institute, might become so with as little delay as possible. A committee on professional ethics was also appointed.

The Secretary was then instructed to prepare and distribute to such journals as he might select, such synopsis of the proceedings as was desirable to place before the profession in advance of the publication of the annual "Proceedings." A member suggested that this was hardly necessary, inasmuch as several professional journals were represented at the convention by reporters, and they would probably publish at once full reports of the proceedings. This, however, seemed hardly to be satisfactory to some of the members, and the instructions were unchanged.

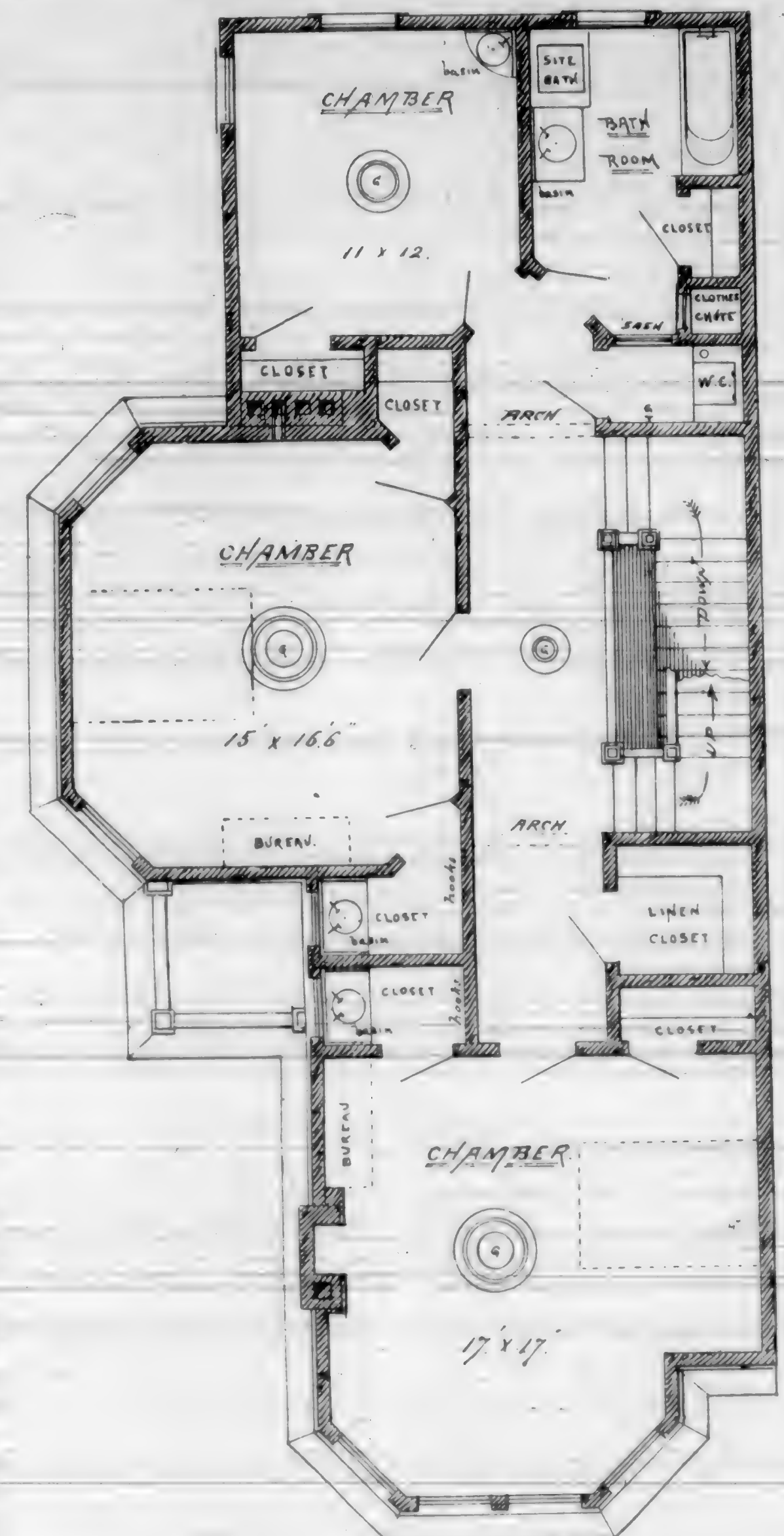
The question of publication having been broached, Mr. Gibson, of New York, said that inasmuch as the *American Architect* had always been the official journal of the American Institute of Architects for purposes of publication, he would suggest that this connection would be continued. As the suggestion at once brought out a protest from different parts of the room, and it so appeared that the members did not care to discriminate for or against any of the architectural journals now published, the suggestion was withdrawn.

During the discussion of the question of annual dues, considerable stress was laid on the injustice of expecting unpaid officials to incur the expenses of attending the necessary directors' meetings and the annual conventions, and it was the hope of those who urged the larger annual due that in this way might be obtained a sum which could be drawn on for a part of, if not all, these burdensome expenses. [The matter of lightening the expenses of the Executive Committee was, we believe, left to the discretion of the directors]. At this stage of proceedings the same matter came up in broader fashion in the shape of a proposition that it should be part of the directors' duties to consider and report whether it were not feasible to devise a practicable method by which the expenses of the members attending the convention might be equalized. As this is an obviously simple thing to accomplish by computing the mileage of those who signify their intention of attending and then assessing the amount equally on all such members, it may be hoped that a step will soon be taken which will make these annual meetings larger and really more representative of the whole country. A delegation could under such conditions afford to come from San Francisco even, while the Eastern men would not be materially affected by the small addition to their own individual expenses. It was, really, of all the suggestions made during the entire convention, the one best worth the making.

Letters were read from the Mayor, Board of Trade, architects and other bodies in Denver inviting the Institute to hold its next convention in that city, but the invitation, as the site was already decided on, was declined with thanks.

The last important act of the meeting was taken by Mr. Brown, of Washington, who offered as an amendment to the constitution, to be acted on next year, a resolution that each Chapter of the Institute might send to the annual convention a member or delegation entitled to cast a vote on all questions equal in amount to the full membership of such Chapter. In other words, the matter of representation by proxy, which we have advocated, is now properly brought before the Institute for consideration, and when one looks back on the business which was actually transacted during the convention, it is discovered that the greater part of the business either was actually done or could have been as well done by small committees whose action would naturally give much more satisfaction if it were taken with the advice and consent of their fellows, who had delegated to them full power to act than ever can the action of individual members, whose presence on a committee hinges on the accident of their happening to be at a convention, where the president's eye chances to fall upon them.

After this as no further business offered, the convention adjourned, subject to the call of the directors.



SECOND FLOOR PLAN

PLATE NO. 2.

Official Report of the First Meeting of the Board of Directors of the American Institute of Architects, Cincinnati, Nov. 21st, 1889.

Minutes—

The following members were present, President Hunt being in the chair: Messieurs,

Briggs	Gibson	McLaughlin
Bruce	Hunt	Root
Carlin	Illsley	Smith
Cutler	Kendall	Treat
Cummings	Littell	

The following gentlemen were elected as members of the Executive Committee, of which the President, Secretary and Treasurer are ex-officio members: Kendall of New York, three years; Adler of Chicago, three years; Gibson of New York, two years; Carlin of Buffalo, one year.

Mr. Cummings reported on behalf of committee on relations between chapters and the associations as follows:

"At the recent convention of the American Institute of Architects, the undersigned were appointed a committee to consider whether any method could be adopted by which the complication at present thought to exist in the relations of chapters and individuals as to the membership of the American Institute of Architects could be removed.

The committee have carefully considered that subject, and have found themselves confronted by difficulties so great as to prove insurmountable by any wisdom which the committee can apply to them.

The committee recognize fully the desirability of providing that every fellow of the Institute shall be also a member of some one of the local societies organized as chapters. In no other way can the Institute be so well assured of the fitness of a candidate for membership as by his being certified to be a member in good standing of one of the chapters. And the fact of all the fellows of the Institute being at the same time members of the chapters tends to confirm the solidarity of the chapters with the Institute, which is so eminently to be desired.

But, on the other hand, there are doubtless many cases in which an architect residing in a town where no local chapter exists, where the nearest chapter may be located at a distance of hundreds of miles, may desire to become a member of the Institute. He may be in every respect qualified to become a useful member of the Institute, and to receive both pleasure and profit from his association with it. To refuse his admission except on condition of his joining a chapter, perhaps in another State, with which he has no natural affiliations, with the members with which he has no acquaintance, seems a measure hardly less than tyrannical.

The committee confess themselves unable to see any method by which the difficulty can be overcome, and they therefore ask respectfully to be excused from further consideration of the subject, and to recommend it to the wisdom and judgment of the Board of Directors.

For the committee, CHAS. A. CUMMINGS, Chairman.
Cincinnati, November 21, 1889.

Mr. Littell moved:

That the full powers of the Board of Directors, not expressly reserved in Article VIII, Section 2 of the By-Laws be vested in the Executive Committee, subject to the obligation to report to the Board, from time to time, when called upon to do so.

Motion carried.

Mr. Gibson moved:

That the Executive Committee shall hold quarterly meetings and other meetings at the call of the President, when the Secretary shall report to him a necessity for the same, or when three members of the Committee shall request him to call such meetings for special business.

Motion carried.

Mr. Cutler moved:

"That in the event of inability to attend a meeting of the Executive Committee, the member so prevented from being present shall notify the Secretary, who shall thereupon, if deemed expedient, notify a director, who attending the meeting shall have full power to act as substitute."

Motion carried.

Mr. Gibson moved:

"That it shall be the duty of the Secretary to notify members of the Executive Committee of any meeting, ten days in advance of such meeting, and members shall at once reply stating their intention or inability to attend."

Motion carried.

Mr. Briggs moved:

"That the following form of ballot be used in the election of members:
OFFICE OF SECRETARY, A. I. A.

DEAR SIR,—Please vote by striking out the alternative word under the heading "Vote," and return the sheet to me at your earliest convenience.

VOTE.	APPLICANT.		LAY INDORSERS.		INDORSING MEMBERS.	
	Name.	Address.	Name.	Occupation.	Name.	Address.
No.	Yes.					
No.	Yes.					

Secretary A. I. A.

Motion carried.

Mr. Carlin moved:

That the Secretary shall enclose with each ballot for membership, a stamped envelope addressed to himself with the words "Ballot for Membership" printed on the outside.

Motion passed.

Mr. Gibson moved:

"That it shall be the duty of the Secretary to notify each candidate for membership of the result of the letter ballot, and enclose a copy of the constitution and by-laws and direct his attention to Article VII, Section 1 of the by-laws and to notify the Treasurer of the new membership election."

Motion carried.

Mr. Gibson moved:

"That the question referred to in Article X of the by-laws be referred to a special committee to be appointed by the chair and to report at or before the next quarterly meeting of the Executive Committee."

Motion carried.

Mr. Briggs moved:

"That a committee of education be appointed by the chair."

Motion carried.

The following committee was appointed: Messrs. Russell Sturges, professor pro tem., Columbia College; Wm. R. Ware, professor architecture, Columbia College; T. Clifford Ricker, professor architecture, Champaign, Ill.; T. M. Clark, Massachusetts Institute of Technology, Boston.

Mr. Kendall moved:

That the Board of Directors now proceed to nominate substitutes for each of its members as were to-day elected and who may be unable to serve, and that such nominees be substituted in the order of nomination.

Motion carried.

The following gentlemen were nominated:

1. Alfred Stone,
2. Levi T. Scofield,
3. W. N. Poindexter,
4. J. W. Yost,
5. E. C. Cabot,
6. G. W. Rapp,
7. W. S. Wicks,
8. N. S. Patton,
9. W. G. Preston,
10. A. S. Bloor,
11. E. J. Nickerson.

The motion of Mr. Glenn Brown presented to the convention and referred to the Board of Directors was tabled.

The resolution related to new sections to be added to the by-laws after Section 1 in Article II.

Mr. Briggs moved:

"That the schedule of charges adopted by the American Institute of Architects and the Western Association of Architects in 1884 be reaffirmed by the American Institute of Architects and printed as an appendix to the constitution and by-laws, and also in the form of a circular with the words "minimum" prefixed before "charges." And if the circular be issued to non-members it shall be plainly marked in large red letters "ISSUED TO NON-MEMBERS OF THE INSTITUTE" printed diagonally across its face.

Adjourned.

JOHN W. ROOT,
Secretary.

THE ASTRONOMICAL SOCIETY OF THE PACIFIC.

The object of the Society is to bring together in cordial co-operation the amateur and professional astronomers of the Pacific Coast. Three meetings a year are held in San Francisco at the rooms of the Society, 408 California street; and three meetings are held at the Lick Observatory, Mt. Hamilton, where an opportunity is afforded to the members to see and use the instruments at the Observatory. The yearly dues are five dollars. There is no initiation fee. Any person who takes an interest in astronomy is eligible for membership. Communications addressed to 408 California street will receive attention.

TECHNICAL SOCIETY OF THE PACIFIC COAST.

The Technical Society of the Pacific Coast has for its object the professional improvement of its members, the encouragement of social intercourse among men of practical science, and the establishment of a central point of reference and union for its members. All persons who are engaged professionally in the practical application of science are eligible for admission into the Society. Application for admission must be endorsed by three members of the Society. The entrance fee is five dollars, and yearly dues are twelve dollars for resident members, and six dollars for non-resident members. The meetings are held monthly at the rooms of the Society, 408 California street, where all communications should be addressed.

SAN FRANCISCO CHAPTER OF THE AMERICAN INSTITUTE OF ARCHITECTS.

This Association holds monthly meetings on the second Friday of each month at their rooms, 408 California street. Fellowship membership is confined to architects in the regular practice of the profession, who have been established in business not less than one year previous to their application for membership. The objects of the society are to unite in fellowship the architects of the Pacific Coast, promote and sustain their professional standing and dignity, and increase the artistic, scientific and practical proficiencies of the profession.

The Initiation fee is six dollars and the yearly dues six dollars.

BILL TO REGULATE THE PRACTICE OF ARCHITECTURE IN THE STATE OF NEW YORK.

SECTION 1. No person shall practice architecture in this State who shall not have attained the age of twenty-one years, and that hereafter no person shall pursue the business or profession of architecture in this State, except in accordance with the rules and regulations herein described.

SEC. 2. There shall be established and created in and for the State of New York a board of architects, constituted as follows: One member from the faculty of Columbia College, one from the faculty of Cornell University, two from the Western New York State Association of Architects, and two from the New York Chapter of the American Institute of Architects.

Within sixty days after the passage of this act, the presidents and secretaries shall call meetings of the members of these associations, and at such meetings there shall be designated by ballot four from the Western New York State Association of Architects, and four from the New York Chapter of the American Institute of Architects, all reputable architects doing business within the said State of New York, each of whom shall have not less than ten years' experience as a practical architect. Notice of such designation and the names of the parties so designated shall then be filed with the governor of the State of New York, and from the persons so designated and from the faculties of the colleges hereinbefore named, and within thirty days from the date of filing the names he shall appoint the members of the board of architects as hereinbefore provided. The members of the board appointed under this section shall hold office, for the term of one, two, three, four, five and six years, respectively, and until their successors shall have been duly appointed and qualified. The architectural societies hereinbefore mentioned shall hereafter designate three reputable registered architects doing business within the State of New York, from which number the governor shall fill the vacancy annually occurring. In case of death, resignation, or removal from the State of any member of the board before the expiration of his term of office, the remaining surviving members of the board shall fill the vacancy from the list of names last submitted, and the person so appointed shall be a member of the board for the remainder of the term of his predecessor.

SEC. 3. Manner of organization, etc.

SEC. 4. Time of meetings—and the board to examine all persons applying for examination, and grant licenses to all persons entitled to same.

SEC. 5. No person shall practice the profession or pursue the business of an architect without a license from the board of architects. Any person desiring to pursue such occupation shall apply to the board for license, and thereupon the board at some regular or special meeting shall proceed to examine the applicant as to his qualifications, with special reference to the construction of buildings, strength of materials, laws of sanitation as applied to buildings, and the ability of the applicant to make practical application of such knowledge in the ordinary professional work of an architect. If such examination is satisfactory to a majority of the board, a license shall be issued to the applicant under the seal of the board, authorizing him to practice the profession of architecture within the limits of this State. All licenses to architects shall be recorded in a book provided for the purpose by the clerk of the county in which the applicant resides.

All persons who shall be at the date of the passage of this act engaged in the practice of the profession in this State, shall be entitled to a license without examination on the payment of a fee of \$5.

SEC. 6. All licenses shall be subject to revocation by the board. * * * No license shall be revoked except by the unanimous vote of all the members.

SEC. 7. If any person shall pursue the business or occupation of architecture in this State, or shall advertise or put out any sign, advertisement or cards designating himself as an architect, without first obtaining a license therefor in accordance with the provisions of this act, he shall be deemed guilty of a misdemeanor, and upon conviction, he shall be fined not less than \$100 nor more than \$500. No person shall be entitled to a license as an architect who is directly or indirectly concerned in any contract for work or materials in connection with the building business, but nothing herein contained shall be construed to prevent any person in this State from planning or supervising the erection of his own building, nor shall the provisions of this act apply to architects from other States who may desire to compete for some special building, public or private, and who may visit the State in person for such special purpose, nor shall it apply to students or employees of licensed architects within this State acting for and by the authority of such licensed architects.

SEC. 8. Fee for such license shall be \$20. * * * All expenses of board to be reported to the Governor of the State.

The above is a copy of the bill which some of the architects of New York State are desirous should become a law. We publish it and leave the matter for our architects to discuss.—ED.

HE KNEW IT ALL.

The builders tell a rather interesting story of a Buffalo capitalist who was pretty summarily taken down for trying to set himself up as the end of all things in whatever he undertook. No matter what was on foot, if he went into it he must have all the say and nobody else was allowed even a side remark. Not long ago he built a fine brick house. In this undertaking, as in all others, he was boss and all hands, dictating to builders, architects and all without the slightest hesitation. At last they grew very tired of the browbeating they had to stand and let him have his way whether it was right or wrong. The house was finished and shortly afterward the owner set about building furnace fires to test his heating apparatus, when behold, there wasn't a chimney in the house!—Ex.

THE RESPONSIBILITY OF ARCHITECTS.

THE committee of the Western Association of Architects at its last annual convention reported as follows on the liability of architects according to a number of decisions recently rendered:

"First Case.—An architect in this city had charge of the erection of a house for a widow. The contracts had been let to a carpenter in one. It provided the architect to be umpire, and payments were to be made on his certificate. Specifications provided a 'first-class job.' Through neglect of the architect, the work was carried out poorly, extremely poorly in many respects, so that the widow refused to pay the final certificate. The case went into Court, and the judge decided that the widow was bound to pay the architect's certificate, just or unjust, and that if she had any case at all she might bring suit against the architect. So she did, and recovered \$800, which was paid by the architect.

"Second Case.—A widow erected a mansion under the charge of an architect. She had difficulty in obtaining the plans. Her directions as to changes were not heeded, and she became frightened enough to consult a lawyer. A private superintendent was employed. The architect was notified in writing as to changes being required here and there, and as to work being carried out carelessly. The house was completed and every certificate was paid, since it would have been useless to contest the payment of any of them. There was no evidence as to fraud, though such there was undoubtedly committed. The widow then sued the architect and recovered judgment for \$4,500, which remained final.

"Third Case.—A citizen erected a block of houses during the winter. The architect neglected to provide means for keeping out the frost, and allowed the mason to build dwarf walls upon the frozen ground. Through this the building became to a considerable extent damaged, and the owner brought suit. The first verdict obtained was \$1,400 against the architect, who appealed and received, incidentally so, as it would appear, an order for a new trial. The case was thereupon tried again in another Court, and verdict was obtained against the architect for \$1,900. The case had been tried more effectively, and the facts brought to the understanding of the jury.

"In all these cases the specifications had a preamble in which the architect was declared to be, in so many words, sole arbiter. Doubtless there are many more similar cases on record.

"In case an architect should not thus expressly declare himself to be sole arbiter, he would not be excused, but held under the rule of established custom. If, however, an architect expressly declares that he is not arbiter, and had nothing to say and to rule, he could, of course, not be held liable. But would not his position be simply pitiable? No respectable architect would like to be under such predicament.

"Every architect should be fully aware that his profession is one that may entangle him in scores of liabilities, and he should prepare himself accordingly. He 'professes' to know, and ought to know. He stands on the same legal ground with every other professional practitioner, with this difference: that his malpractice is far more clearly and positively established than is the case in any other profession. The preacher has nothing to fear on this score. Little more has the land agent. Slightly more still the doctor and the lawyer, but nearest to the architect comes the operating surgeon. Many law-suits have established the certainty of severe consequences to the surgeon of the surgical operator upon human bodies when he commits a blunder or even an error.

"There is nothing more certain than that in all cases the architect is legally and pecuniarily liable for every blunder by him committed, or under him, through the agency of any of his employees. The responsibility on this account is far-reaching, and surpasses that existing with any other profession."

Our space does not permit us to quote further from this valuable report, so full of hints to the careless. The inference to be gained is, that the cautious, prudent architect will so word his certificates that he will not take all the responsibility, but he may express it "as his opinion" or "in his judgment" the work has been done according to contract.

Subscribe for the CALIFORNIA ARCHITECT, \$2.00 per year.

NOTES AND COMMENTS.

A handsome model of the grizzly bear "*Monarch*" adorns our editorial table. The cast was presented by sculptor R. Schmid, and represents the great animal crouching with one paw on a shield bearing the Coat of Arms of the State of California. The modeling is excellent, full of life and a credit to its author.

The nine-story *Chronicle* building is now nearing completion. As the *Chronicle's* great rival, the *Examiner* seeks to "double discount" any enterprise exhibited by its contemporaries, it now makes the announcement that it intends to erect a building. It is safe to say that the *Examiner* will do what it says; and the new structure will astonish the natives—will be a veritable "monarch" among our buildings.

Senator Fairfit is reported intends to spend \$200,000 in adding two or three stories to the Lick House. A Chicago architect has been consulted, though work on the building will not be commenced before next spring.

Read our list of books for sale and notice that a subscription to this journal for one year will entitle you to a rebate on purchase price of a book if sent direct to this office.

Draughtsmen out of employment will do well to leave their address at this office.

It is reported that the obelisk in Central Park, New York City, is in danger of being seriously injured by disintegration. It has been scaling off ever since it was brought to this country, and there is great danger that within a few years the hieroglyphics will be entirely obliterated. The obelisk was coated with paraffine a few years ago, but the remedy did not prove effective. The Park Board will make another effort to preserve this monument, and in order to ascertain what is best to be done, have appointed a committee of professors to examine the stone and report as soon as possible, as to its condition with particular reference to its preservation.

The stone is a native of a climate of an equable temperature, and evidently its health can not stand the shock of repeated changes from intense heat in summer to equally great cold in winter. We would recommend that the obelisk continue its journey westward and take up permanent quarters in Golden Gate Park where it would, we have no doubt, receive a cordial welcome from the monuments to other celebrities, which have long enjoyed the mildness of our glorious climate with never a complaint about the night air.—Ed.

The profession has heretofore had so little political significance that it has been hard to enlist our daily press in any measure of professional interest. In fact, the tendency has been to ignore the architect—"Building." [To a certain extent this has been true, but we note a change in public sentiment in this direction.—Ed.]

In medicine and law both, the public is protected—the one profession involving life, the other property, while in architecture, involving both life and property no legal restriction is imposed and any ignorant trickster may open an office and victimize the public.—"Building."

The question of licensing architects so as to have a check on gross inefficiency is a wise step, but how incomplete a step it is without throwing a like protection about the enlightened competent mechanic and contractor.—"Building."

Advertisements on buildings should be taxed in the ratio of their obtrusiveness. A constituted authority should be appointed, to whom individuals feeling aggrieved could refer any act of vandalism upon artistic propriety or educated public taste.—*English Exchange*.

While such restrictions might be tolerated in England, we very much fear no such sweeping regulations could be put in force in this country, though occasionally we have known an owner to appreciate the architects case in producing a handsome edifice, by restricting the size and location of his tenant's signs.—Ed.]

Mr. Charles Follen McKim, senior member of the firm of McKim, Mead & White of New York has put \$20,000 into the hands of Professor Ware of the Architectural Department of Columbia University to be used by the trustees as a perpetual

maintenance of a traveling scholarship or fellowship to that university. With the traveling scholarship already founded through Mr. Schermerhorn and the McKim benefaction, Columbia University will be by far the best endowed in the Architectural Department of any school in the country. Some day California will be heard from through her generous benefactors, but the thought has not quite ripened yet.

The panorama of the Battle of Gettysburg painted by E. J. Austen, and several European artists, now on exhibition at Tenth and Market Streets, is a remarkably vivid representation of an exciting battle; the subject chosen for representation is of great interest to all Americans, and has been handled in a truly masterly manner.

The project to change the grade of Market Street from Valencia to Fifteenth Street, which it was proposed some time ago has been revived and brought before the public again, by an application to the Board of Supervisors. It is proposed to lower the grade at the highest point, twenty-six feet (from sixty feet to seventy-five feet) and by raising the grade in the low portion beyond the cut, to make an easy ascent and by this means induce the business of the street to extend itself along Market instead of branching off up Valencia Street.

In the appeal case of Robert Barton vs. Contractor McDonald for damages for personal injuries caused by falling into an unguarded hole on East street, the Supreme Court has affirmed the decision of the lower Court in favor of plaintiff Barton.

The decision holds that when the condition of a public street is made dangerous by a contractor in repairing the same, he shall erect and maintain around the dangerous spots a good and substantial barrier, and for failure to do so he is guilty of negligence.

The *American Architect* makes the following sensible suggestion to architects: "Of course in regard to many building matters it is necessary to follow the advice and direction of ladies, but keeping in mind feminine amiability, which may at a moment's notice forget all promises, directions, etc., the prudent architect will provide himself with memoranda in the good wife's handwriting, that he may have recourse to it if necessary to establish his claim."

The cause of the above advice grows out of a suit by Architect Manly N. Cutter against Mr. Morris, a gentleman of wealth in New York City. The case may be summed up like this. Mr. Morris engaged Mr. Cutter to build an extension to his house—a room in which a person addicted to snoring could sleep without disturbing the whole house. Mr. Morris then went to Florida and expected to find on his return the work completed for five thousand dollars.

What was his astonishment on his return to find the change had already cost twelve thousand dollars and that fifteen thousand more would be required to finish according to the designs suggested by his wife during his absence.

Mr. Morris sued the architect for sixteen thousand dollars' damages—but the suit was thrown out of court, and Mr. Cutter's suit on his bill was entertained though it took years to get judgment. Mr. Morris, like other rich men, took advantage of his wealth and had the case carried to the Court of Appeals, which has just ordered a new trial.

OUR ILLUSTRATIONS.

Plates No. 1, 2 and 3 show the plans and elevation of a small residence intended for a corner lot—Huerne & Everett, architects.

Double plate No. 4 a residence designed by H. T. Bestor, architect, to be erected at the Sandwich Islands. Wide verandas and projecting cornices shade the building and protect it from the heat of the tropical sun. A feature which might be oftener employed here to advantage, where space is obtainable, is the location of the kitchen and its appurtenances in a separate building.

Plate No. 5 shows the main entrance to Cooper Medical College, corner of Sacramento and Webster Streets in this city, of which Messrs. Wright & Sanders are the architects. It is the first of a series of views we propose to publish from time to time, of the entrances to some of our public and private buildings.

SCHOOL-ROOM SPACE.

Mr. Courthope Bowen, an Englishman whose opinions on the proper size and arrangement of school rooms are received with great respect in his own country, recently made the following statement as to what, in his judgment, might be regarded as a fairly good schoolroom: Taking, for instance, a room 14 feet high, fairly ventilated and always well aired at recess, two-thirds of the floor space should be assigned to the scholars and their desks and the other third should be kept for the teacher, blackboards, etc. With single desks, 22 inches should be allowed from side to side, and 3 feet from back to front for each scholar. The passages need not be more than 18 inches for those running from back to front, and 1 foot for those running from side to side. In such arrangement, counting the passages, each scholar has (without reckoning the share of the space allotted to the teacher) a trifle more than 40 inches from side to side, and just 4 feet from back to front. In a room 25 feet by 20 feet the floor space for scholars' desks will be 16 feet by 20 feet, with 4 feet from back to front per row, and accommodation is provided for 20 scholars. The whole floor space is 500 square feet, and the cubic contents of the room 7,000 cubic feet, with 20 square feet and 280 cubic feet per person.—*Ex.*

CURRENT PUBLICATIONS.

American Architect, November 16th, contains: "Filtration at the Experimental Station in Lawrence," "The Sulphur Mines of Sicily," and "Columbus" (a pilgrimage to Palos) by Fred A. Ober. November 23rd, Convention Western Association Architect. November 30th, Cincinnati Exhibition, Report of Recent Conventions; Illustrations, Courthouse, Savannah, Ga., Wm. G. Preston, architect, Boston, Mass.

Building, November 16th, contains: "Notes on Estimating," David W. King; "Sir Christopher Wren and His Architecture," and illustrations of Madison Square Gardens, McKim, Mead & White, architects, New York; also design for Cathedral St. John the Divine, New York, J. Roth, architect. November 23rd, "The Electric Motor for Domestic Purposes," H. P. Prindle; "The Barge Exhibition," and design of Covered Well III mentioned in competition, New York Sketch Club. November 30th, Proceedings Convention, A. I. A. Design for Iowa Soldiers' Monument, A. E. Davis, architect, Mott Haven, New York City.

Inland Architect, November, "Romanesque Architecture" (Baptistries or Rural and Mortuary Chapels), "Steam Plant for Isolated Electric Light Plants." Illustrations, Monadunk Office Building, sixteen stories high, Burnham & Root, architects, Chicago.

Engineering and Building Record, November 16th, "Suspension of Hot Water Transmission Through Streets," "Pavement Specifications," "The Prall System," "Public Heating Schemes," "The Proposed Channel Bridge" illustrated. November 23rd, "Filtering Experiments by the Massachusetts State Board of Health." Nov. 30th, "How to Use Steam Expansively in Direct Acting Steam Pumps," J. F. Holloway before the A. S. of M. E. "Hot Water Heating," and full account of the convention of architects.

Journal of Proceedings, (R. I. B. A. organ) November 7th, contains: "The President's Address," Mr. Alfred Waterhouse, R. A., a most valuable and complete discourse upon the architectural necessities of the present time, also "Angles and Terminal Features," F. T. Bagallay.

Painters' Magazine, November, "Relief Work in House Decorations," "Painting in this Country," "Ancient Process of Painting," "Decorative Treatment of Doors," "Wall and Ceiling Designs," "Modes of Mural Decoration," "Modern Methods in Decoration."

Sanitary News, November 16th, "Certain Provisions of Continental Legislation Concerning Food Adulteration," "The Amines Process of Sewerage Treatment," R. Godfrey; "The Responsibility of Architects," November 23rd, "Contamination of Drinking Water by Lead," Sinclair White, M. D.; "Licensing Architects," November 30th, "Kitchen Drainage in Philadelphia," "How to Have a House Built."

The Architects, Builders and Hardware Journal of Atlanta, Ga., has made its first appearance, for December, edited by Thos. H. Morgan, and presenting a creditable showing for Southern enterprise in this its first number. It contains three photo-litho. plates of prominent buildings; notably, the Confederate Veterans' Home, Atlanta, Ga., Bruce & Morgan, architects. It should receive the hearty support of the section it represents.

The Western Architect and Builder of Cincinnati, November, publishes a short illustrated article on "Tenement Reform."

National Builder Chicago, November, "Mortars and Concretes of Antiquity and Modern Times," Adolph Cluss, architect; "The Art of Drawing."

The Journal of Building, Pittsburg, Pa., has appeared in its initial number. We wish it success. It is published semi-monthly; price until February 1, 1890 being \$1.00 per annum, regular price \$2.00.

Brickmaker, November 15th, "Petroleum as a Fuel."

American Engineer, November 20th, "Marine Engineering upon the Mississippi," "Dr. Joule, the Discoverer of Mechanical Equivalent of Heat."

Yr. American Builder, December, "Classification of Joints," "Masonry," "Hip and Valley Roofs," "Stairs of a County House," "Strains in Trusses."

Northwestern Architect, November, is devoted wholly to the Consolidated Convention except an article entitled "Evaporation of Water in Traps," Glenn Brown; illustrations: Apartment House, Minneapolis by G. W. and F. D. Orff, architects.

Canadian Architect for November contains: "The Relation of an Architect towards Contractors," G. F. Stalker.

Architectural Era, November, "Canterbury Cathedral," "Byzantine Architecture," Illustrations: The Schermerhorn, H. J. Hardenberg, architect.

Western Architect, Denver, November, "Development of Form as an Expression of Beauty, Shown in Traditional Types and Styles of Construction and Decoration," "The Manufacture of Brick," Illustrations: Design for Cathedral, Salt Lake, M. D. Kern, architect.

Fire and Water, November 16th, Description, illustrated, of the Madison (Wis.) Water Works. November 23rd, "To Reduce the Fire Loss in Manufactories."

Clay Worker, November, "What Clay Has Done for History," "Brick Making and Burning."

American Machinist, November 21st, "Force, Motion and Work," "Practical Drawing," J. G. A. Meyers.

The Mechanical News, November 15th, "Electricity in the Engine Room," James F. Hobart.

Scientific American, December, designs and description of the New Bourse, Paris, M. Berteault, architect.

House Painter and Decorator, November, "The History of House Painting," "The Suggestive in Decorative Art."

Northwestern Mechanic, November, "Vibration in Buildings," "Petroleum as Fuel," "Electricity in the Engine Room."

The Builder and Woodworker, December, "Door Frames."

HAS OUR ARCHITECTURE A NAME?

No building ever produced would have been pure architecture in the eyes of any preceding age. Whatever in it was novelty would have been regarded as an innovation and in bad taste.

The complaint that when we vary from historic precedent we will have no suitable name for our architecture—will not be able to call it Doric or Romanesque or Saracenic, or by some other well-known name, is a complaint that means nothing. No style ever produced had any name until the title was given afterward.

Had anyone asked the architect of the Parthenon what style he was building in, or had anyone called upon Waynflete, as the Cathedral of Winchester rose above the ground, and asked him what style he was building it in, what would have been the answers? The work of neither one could be named by any historic title. So that if we are able at this time to say whether our designs are Romanesque, Syrian or Byzantine, it constitutes no reason why the design may not be good, but if it were exactly in imitation of the art of a thousand or two thousand years ago that would necessarily render it objectionable.

To attempt to make a building, erected for modern uses, in this country, look as though it had been built by the Greeks or Romans two thousand years ago is folly. A man who complains of a design because it uses some of the elements of Greek or Gothic, without using all of them, and because it uses some elements the Greek or Medieval architects did not use, might with equal propriety have condemned the design for the Parthenon because it was not a counterpart of the cave of Ben Hassan.

This is our lesson, that we shall do the best we can from all that we know. Be independent enough to use our knowledge of history and historic work, combined with whatever we can invent, beautifying each production to the limit of our ability, serving each purpose of the building as best we are able, and letting the name for our architecture be assigned by future generations.—From a paper read by J. W. Yost, architect, before the Ohio Architects at Dayton.

"HINTS ON HOUSE BUILDING" BY ROBERT GRIMSHAW.—A new book just published for the benefit of those who contemplate building dwelling houses. Almost everything is suggested that need be thought of for those who desire to know beforehand the kind of house they should build, how, and where to locate it. Read it and you will be told in a unique and pleasing manner how to build. Price 50 cents. Sold by Practical Publishing Co., 21 Park Row, New York.

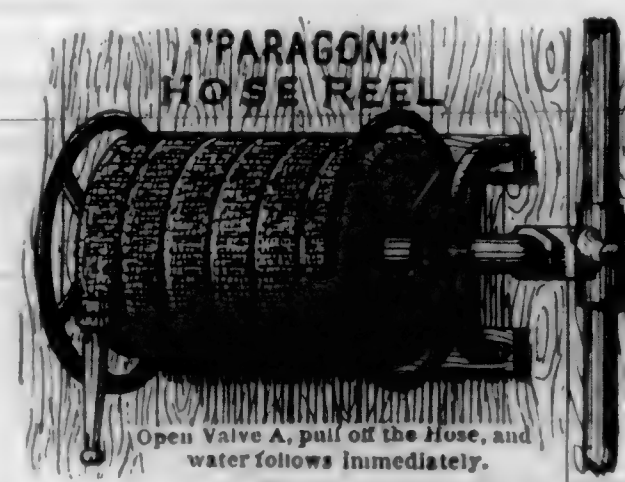
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REVIEW
VOLUME XI

DATE 1890

PUBLISHER WORLD MICROFILMS PUBLICATIONS in association with THE
ROYAL INSTITUTE OF BRITISH ARCHITECTS

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PUBLISHED BY THE
 CALIFORNIA ARCHITECTURAL PUBLISHING CO.
 408 California Street, San Francisco, Cal.

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The California Architect and Building News.

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408 CALIFORNIA STREET,

SAN FRANCISCO, CAL.

VOLUME II.

JANUARY 18, 1890.

NUMBER I.

The California Architect
and Building News.

A monthly Journal devoted to the Architectural interests of the Pacific Coast. Published on the 18th of each month by THE CALIFORNIA ARCHITECTURAL PUBLISHING COMPANY, 408 California Street, San Francisco, Cal.

W. P. MOORE, President, OLIVER EVERETT, Secretary.

THE CALIFORNIA ARCHITECTURAL PUBLISHING COMPANY is composed of Architects and others interested in the profession.

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Remittances should be in the form of postal orders, payable to THE CALIFORNIA ARCHITECTURAL PUBLISHING COMPANY, and all communications addressed to the office of the Company, 408 California Street, San Francisco, Cal.



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NOTICE OF MEETINGS.

SAN FRANCISCO CHAPTER, AMERICAN INSTITUTE ARCHITECTS, meets second Friday of each month at 408 California Street.

TECHNICAL SOCIETY, meets first Friday of each month at 408 California Street.

THE regular monthly meeting of the San Francisco Chapter of the American Institute of Architects was held Friday evening, January 10th. The regular business of the Association was transacted.

Mr. Sanders, the teacher of the class in drawing, reported on the work done and progress made by his class during the year just past, and made an interesting exhibit of the work done by his pupils. The designs gotten up in competition for the prize offered by the Chapter, were shown, and received much well deserved commendation, for they gave evidence of careful study and were very neatly executed.

Mr. Sanders stated that arrangements had been finally made to establish the class in Mathematics, and gave notice to would-be students to meet Monday evening at his office to decide on the evening and hour of meetings.

WITH this number we begin our Eleventh Volume. After ten years of progress and improvement, we enter on the work of the coming months, determined to make the pages more interesting and the illustrations superior to whatever has gone before.

The outlook is promising. Work the past year has been plentiful and the prospects for a busy and prosperous year to come could not be better. With good crops for our farmers, plenty of work for mechanics and a generous patronage for the CALIFORNIA ARCHITECT AND BUILDING NEWS we, each and all, can enjoy the benefits of our honest labor.

The older cities and towns are making up to the requirements of the times, and many of them are asking for the more spacious modern public building. New towns are starting up all over the coast, peopled mostly with a cultivated and energetic class who have come to stay, if we may judge by the tasteful and home-like appearance of their villas and cottages, while active preparations are being made for a greatly increased number of this kind of improvements.

The large tracts of our best lands held under Mexican grants have in many instances been divided into farms, and sold to actual settlers, which necessitate commodious and modern farm buildings in place of those required for extensive cattle ranges.

The fact that all the Eastern lines of railroads must make this Coast the outlet for their trade, will have an important influence on the permanence, capacity and convenience of the business structures that may hereafter be erected; already the ground is broken for several, and others will follow in the early spring.

The people have come to the conclusion that better facilities must be furnished for pure water supply, and for protection against fires, and many large blocks of capital are finding their way into such enterprises which will require suitable buildings, and engineering works.

Many new projects and industries are coming to the front,

many of the older ones are being extended or improved upon, and almost without exception the buildings and plants hereafter erected must be of the most modern type. To these structures, together with residences and buildings, a large share of the attention of the Architect can be profitably directed.

The indications for a period of general prosperity have given an impetus to the various industries furnishing materials; new brick-making establishments have entered the field and the older ones have extended their facilities. Improved fire-proof constructive tiles and terra-cotta are obtainable. Our granite quarries can now supply any color, stone from black to white (including mottled, red and gray) and any size up to 25 or 30 feet. Many new marble quarries have recently been opened, and marble from jet black to spotless white can be supplied of large sizes. The available sand stones running through all the various shades of red, blue, yellow and nearly white, and slate from native quarries are now obtainable in the market.

The great forests of redwood, pine, fir, cypress, cedar and many of the ornamental woods are being worked into practical shape for the market with an increased energy. The great natural asphaltum mines in the Southern section of the State are being worked by more powerful companies, the natural oil wells are receiving their share of attention, and the recent strikes of natural gas in various localities, having taken the "croakers" by surprise, the possibilities being beyond computation, prosperity seems reasonably assured, and the prospect opens up a wide field for technical knowledge and artistic design which can be used advantageously for the public good, and in our next December number we hope to chronicle the fulfillment of these splendid promises.

One word more, it is hoped that the architects throughout the Pacific Coast will take a personal and individual interest in the success of this journal; encourage it by practical suggestions and contributions, and bear in mind that its columns are always open for the discussion of subjects of interest to the profession, or tending to the advancement of its standing and influence.

WE publish in this number, the paper read before the December meeting of the San Francisco Chapter of the American Institute of Architects, by Mr. K. Shimoda, a member of the Japanese Institute of Architects, and of the Penitentiary Association of Japan.

The paper was illustrated with many photographs of Japanese scenery and colored drawings of carving and decorative design, which unfortunately cannot be properly reproduced in the space at our disposal.

Mr. Shimoda described in an interesting manner, the construction of a Japanese hut and a Japanese palace of thirty centuries ago, and thence traced step by step the improvements that have resulted in the typical Japanese architecture of the present time.

Though Mr. Shimoda very modestly disclaimed, in quaint expressions, any wisdom of his own, he strenuously insisted that his countrymen should have the credit of producing an entirely original style of architecture, the result of the evolution of ideas not borrowed, but entirely distinct from the works of any other nation.

Mr. Shimoda is now studying the methods of this country, previous to visiting other nations still more distant from his native land, and learning the uses and relative importance of the methods of construction, and the ever increasing number and variety of materials employed in the erection of our buildings; the object in view being the instruction of his countrymen in the manner and customs of the outside world. He proposes to make something of a stay in this city, and to become better acquainted with our language and habits, when he will visit the art centers of the world to continue his observations and studies.

We bespeak for Mr. Shimoda friendly greeting and assistance from the profession wherever he may stop on his tour.

WE notice the formation of the Golden Gate Improvement Club, composed of property owners north of Golden Gate park and westerly from Scott street to the ocean beach. We would suggest that a strip of land, at least the width of Fulton or D street, be taken along the full length of the northerly side of the park, making the street double width for the whole distance; that a first-class sidewalk twenty or twenty-five feet in width be constructed on the park side of the street, thus forming a wide promenade three miles in length; the ocean breezes coming through the park furnishing pure air in such abundance as to place beyond comparison with that of any other city.

As a matter of convenience for the public, no one particular car line should have a monopoly, but, with such increased width all the main lines centering on that side of the park should have the right of way along the whole length, so that visitors may alight at any desired point.

WHILE the cause, effect and results of the late Boston fire are being investigated for the purpose of fixing the origin, loss and, if possible, teaching us safer modes of constructions, it may not be out of place to make a few statements as gleaned from our exchanges.

The cause appears to have been from the falling of an electric light wire upon a wire used for transmitting electric-clock signals and with which the building first destroyed was amply supplied. That seems to have been the cause of the fire, the effect we know, and the result of the investigation, if fastened upon the companies interested, is an important one. In twenty minutes from the sounding of the first alarm, the building first attacked by the fire, six stories in height and built of granite, brick and iron, was a mass of smoldering ruins in its own basement.

If as a result of this latest conflagration, anything shall have been taught us regarding the proper construction of buildings or the best means to stay the progress of a great fire—to say nothing of the cause—we may be truly thankful for the lesson. In any city where there are narrow streets—high buildings with immense, unprotected plate-glass windows—telephone and electric wires placed without proper inspection—and a water supply that loses its power as an extinguisher at the third story, we may rest assured that the necessary elements of a conflagration are only waiting for a cause.

The latest information of an electric-light wire fire, comes to us under date of 8th inst. from St. Louis, when the Western Union office was burned out. Cause: (we quote from the dispatches)

A network of wires led into the building by way of the roof. The storm of yesterday loaded these down with a heavy coating of ice, and yesterday and last night many breaks occurred. This morning a wire leading to the basement came in contact with a broken electric-light wire, at once setting the building on fire. Result: Many narrow escapes from death, and the building destroyed.

That we legally allow the cause for fires to be over our heads, in our houses, and under our feet, is a matter that must sooner or later provoke action as to the responsibility of these companies, who are jeopardizing our lives and property.

Referring to the foregoing we present a condensation of the law of July 27, 1859, governing the height of buildings in Paris. CONDENSATION OF THE LAW OF JULY 27, 1859, REGULATING THE HEIGHT OF BUILDINGS IN PARIS.

The height of buildings fronting on public street is determined by the legal width of such streets and is measured at the centre of the building, beginning at the sidewalk level and including all entablatures, attics and other features built on the line of the front wall.

This height may not exceed 11.70m. [38.37 ft.] on streets less than 7.80m. [25.58 ft.] wide.

14.60m. [47.88 ft.] on streets between 7.80m. and 9.75m. [25.58 ft. and 31.98 ft.] in width.

17.55m. [57.56 ft.] on streets 9.75m. [25.58 ft.] wide and over.

On streets 20m. [65.60 ft.] wide and over, the height may be carried to 20m. [65.60 ft.] but in no case shall the building contain more than six stories including the entresol.

The height of the ridge above the cornice shall not exceed half the depth of the building, including the cornice projection.

The profile of the roof on the street side shall not pass beyond a line running at 45° from the outside of the cornice.

On boulevards, quais, public squares and streets not less than 15m. [49.20 ft.] in width, and also in interior courts this line of 45° may be replaced with an arc having a radius not greater than half the depth of the building, but the projection of the cornice shall not fall within this arc.

Chimneys shall not penetrate the roof at less than 1.50m. [4.89 ft.] from the line of face nor rise more than .60m. [1.96 ft.] above the ridge.

The front wall of Dormer's shall be at least .30m. [.98 ft.] back of the face of main wall, and the entire structure of the dormer should not rise more than 3m. [9.84 ft.] above the base of the roof. Their width shall not exceed 1.50m. [4.92 ft.] The walls of dormers must be parallel with one another and the distance between them must be at least 1.50m. [4.92 ft.] whatever the width of the dormers may be. A second range of dormers may be employed if kept within the prescribed profile.

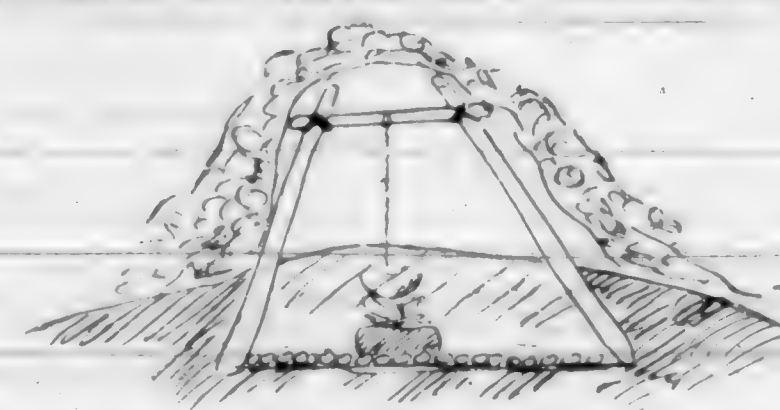
The minimum height of a story shall be 2.60m. [8.52 ft.].

The projection of a cornice shall not exceed the thickness of the wall at its summit.

WE are pleased to second the suggestion of the *Inland* that the first work to be accomplished by the Consolidated Convention of Architects, shall be toward the establishment of a legal status for architects—in fact, we have in the columns of this journal already mentioned the matter. To bring about this result there must be action—harmonious, united, and followed to a conclusion. This must come from the profession itself, and there should be no wasting of words, or personal bickerings over the subject. It is a fact not generally considered—and not to be wondered at—that the standing of an architect in this country—professionally speaking—has not been determined.

It is true, that "by their works ye shall know them"—but the same may be quoted concerning the lawyer and physician, who are, by our laws, legalized, and have thereby a social and a professional standing in the community. We commend this subject to our leading architects that preliminary action may be taken at once.

AN OUTLINE OF JAPANESE ARCHITECTURE.*



An Early Japanese Hut.

GENTLEMEN:—I am very much pleased to come face to face with you, here, as an honorary member of the most celebrated Institute in this civilized nation, by the most obliging introduction of Mr. Sanders, although I am a young architect from Japan.

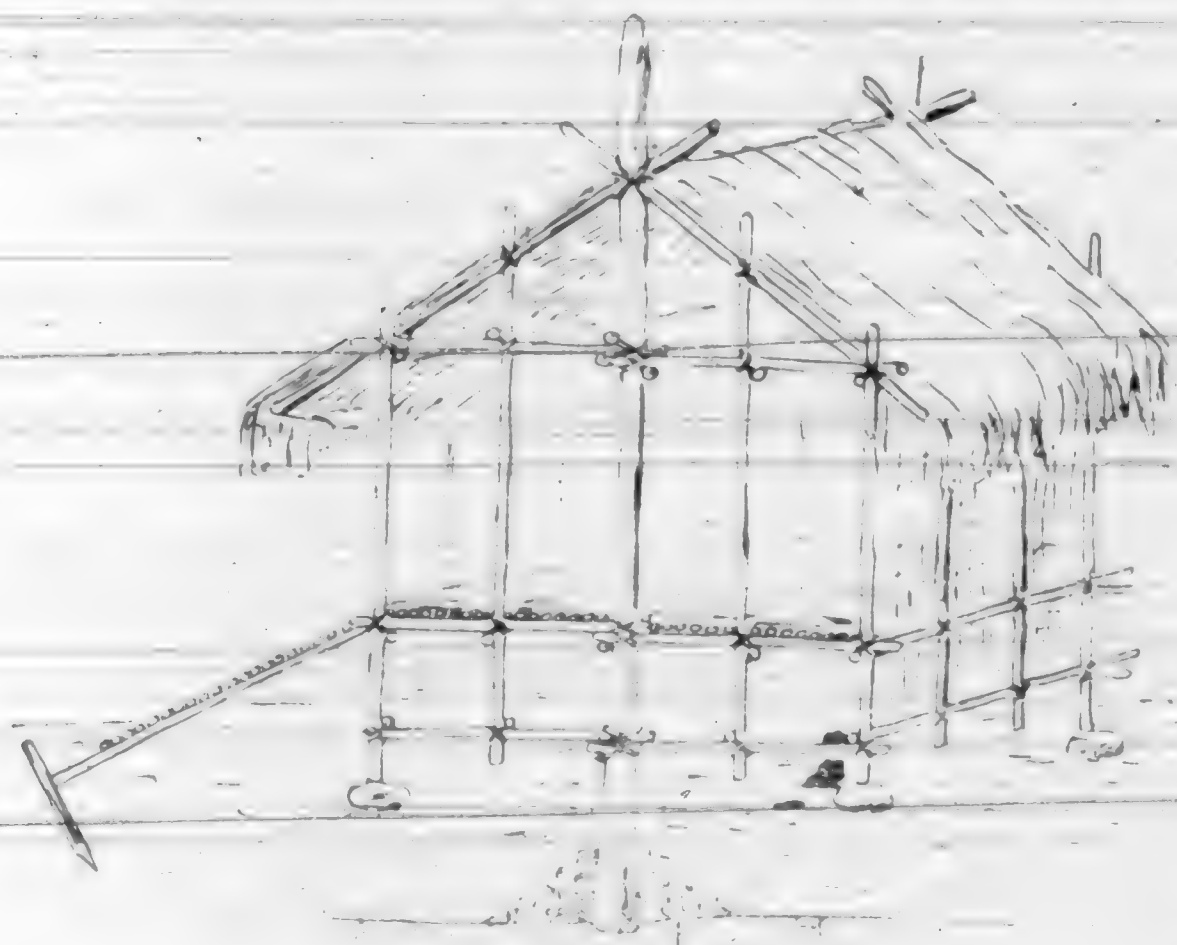
Since I am a member of the Japanese Institute of Architects and also of the Penitentiary Association of Japan, I have engaged to report every interesting note, and every advantageous method, to our membership. Although, I am one of the scientists of Japan, here, I am simply a young boy; now, if I explain any scientific theory before you, it would be just the same as to lecture "gravitation law" before Sir Isaac Newton; and if I report some practical result to you, it would be just the same as if a child should advise its parents not to fall into the ditch. Then there is nothing to speak before you about the facts in the civilized world; but fortunately, I have one subject, "The outline of Japanese Architecture in the past and the present," which is not yet well known to other civilized nations; and although it may interest, it will not increase your scientific or artistic ideas.

*A paper read before the San Francisco Chapter of the American Institute of Architects, December, 1889 by Mr. K. Shimoda, member of the the Japanese Institute of Architects and of the Penitentiary Association of Japan.

directly; however, I think, in some cases it will be a good thing for architects to know all about the physical phenomena and building styles of every nation of the world. I am very sorry that I have had no higher education in writing and oratory, like the politicians and lawyers, and it will be difficult for you to understand my broken English, yet, if you please, I hope you will excuse me if I speak a few words more. From the science of astronomy we know of the Nebular theory, which theory treats of the special elements of the heavenly bodies, or present universe, after variation took place. The earth is said to have been spilt out as a small portion from the central and main nebular mass, and revolves around that mass by regular attraction without change; and the constitution of the earth is composed of sixty-eight or commonly sixty-three elements, as are all other planets, for their origin is the same. Those planets which were small in size when spilt out from the main nebular mass, are said to be solidified more easily than large masses; and the formation of the stone and iron periods and even the sulphuric acid and coal periods, through which the earth has passed, might be supposed to be the same in other planets, but there never has been any communication from them to the earth, except broken meteors, which suspended in the atmosphere of the earth, being cast from other planets when the earth moves through the fixed path and across between several planets in June, July, August and September, especially when it comes to the atmosphere of the earth, is great velocity and friction produced and it is heated and falls down upon the ground as a ball of fire. Although we may analyze and examine the meteor, chemically or physically, we are unable to know the social condition of other planets, and of course we cannot judge of its social customs and building styles, since the meteor is not news or a record of the social degree of the other planets. In the next step, the science of geology tells us about the formation and life of the small and hard earth, which has been solidified from a liquid state, at a great depth from the surface of the earth, and after many millions of years have elapsed, we are now of a moderate size and active human kind not so fat nor slender, and quite different from all other animals in all respects; but I cannot tell you how the inhabitants of the other planets, of the same origin, are formed. Surely, an opportunity to communicate the same has not been granted except theoretically, as I said before; then all the artificial works of the earth, such as buildings, must have been originated by human kind of the earth without any aid from others. Well, about the view of the new science of anthropology, Prof. Agassiz expressed the doctrine of polygeny, or the assertion that there are eight centers of human tribes on the earth; but Mr. Darwin advanced the theory of only one center, or one origin on the earth; those who believe in monogeny or the essential specific unity of the human species, have long warred with each other without satisfactory results. As you know, many authors investigated eagerly the skin, hair, eyes, voice, trunk, extremities, skull, stature, proportion, weight and strength, after collecting and classifying several kinds of fossils and ancient tools for working, from every part of the world; I prefer the former, or the theory of polygeny, as a more scientific theory than the latter, by the aid of architecture and archaeology. I am sure it is not difficult to theorize and judge from the imperishable relics of the stone period, which we obtain from the ground, but ages before history or even tradition began, it can be shown that man lived on the earth; and human remains are found associated with the fossil relics of animals now extinct and belonging to a period of probably 50,000 or 100,000 years ago. Sir John Lubbock, our greatest authority on the subject of anthropology, thinks man existed during the Miocene period; and the other day it was reported that bones taken from the undisturbed caves in Miocene rocks on the Mediterranean coast, had carved on them figures of prehistoric animals.

The earliest architecture of which we have any record, is that of Egypt. It is the best constructed and best preserved of all ancient styles, and it is very remarkable that the oldest specimens remaining are the most perfect. We have no means afforded us by which we can trace the origin and development of architecture, in the oldest cradle of the art, but we can well imagine that a long period must have elapsed before the mechanical skill was developed which the execution of these great works displays. The well known pyramids, which are situated near Memphis, in lower Egypt on the western banks of the Nile and close to the margin of the desert, are the oldest existing specimens of human architecture; but a telegraph engineer, who repaired the cable in the Atlantic ocean last year, reported many immense works of the stone period, discovered by him at a great depth; this will be explained reasonably as the origin of the Egyptian architecture.

Thus, we suppose that the earth has undergone many great changes since its formation, and we may consider Egyptian art to be a recent work, if we compare the stone period with the birth of the earth. In the twelfth century B. C., an essentially brilliant period in Egypt, there existed the first famous stone work, the pyramid of Ghez. About that period, in Japan, the first work was done, a palace was built for the ancestor of the Emperor. Its construction is scarcely known. Thus, by collecting several kinds of records and pictures, at first it was necessary to dig the ground till they reached a large stone or rock stratum, and standing a large log upon this foundation, which they called "the heavenly column", and the bottom of the column was to be hardened with stone or gravel; all other smaller columns for compartments were built radiating towards the heavenly column and they were tied with a strong rope, without using any metallic fastenings, such as nails. Its floor consisted of a range of small logs and its roof was covered with branches and bark; it was a rule to make the floor very high, or about eight feet above the ground, but it was not for the purpose of avoiding moisture but it enabled them to look at the noble and



bright sun. They respected the sun as a heavenly superior, and consequently, they were pleased to attend constantly from morning until evening, a much longer time than the common people or cave dwellers did. In such circumstances the common people continued for a long time to live in caves, working in the daytime as hunters, fishers and agriculturists, and sleeping in caves at night. From about the sixth century, B. C., the palace building came to be advanced in its construction and appearance—metallic fastenings were used to combine timbers. Planks for floors were selected to be as thick and broad as possible. The roof was covered with bark and sawn boards of timber upon the

framing of small timbers, and care was taken to build so as to resist the wind; even common people began to build a log hut within the caves, but gradually they elevated the floor, and at last they made the floor on the ground out of the caves.

In Japan there are many stone quarries, containing Plutonic and volcanic stone, together with many great tracts covered with wood fit for building purposes, tools, furniture, etc. However, the ancient Japanese could not have been strong enough to work at stone hewing, therefore there was no stone work like there was in ancient Egypt, although it is one of the oldest countries. All houses which were made of timber and bark, as bird nests, were always destroyed by violent storms and destructive earthquakes. I am sure that the first step of the Japanese architecture, as bird nests, was not introduced from other foreign countries, while after many years have passed, some parts of Indian and Chinese architecture are said to be imported. We can easily explain that the origin of Japanese architecture was independent, or in other words, the original Japanese tribe was not derived from that of China by anthropology, archaeology, or architectural styles. But after several years had elapsed, social phenomena was introduced little by little; while the quality of the brain of the Japanese is just opposite to that of the Chinese. The Chinese are so slow that they do not think about improvement, while the Japanese are so active that they improve as quickly as possible; and not only their strength and voice, but their skull is much different in form and proportion. Consequently, though Japanese architecture resembles the Chinese, its origin is not the same, for Japanese architecture is original.

As you know, architecture is divided into two parts: one, being original architecture and the other copied architecture. The ancient Assyrian low-relief and bas-relief are put on very thick walls (15 or 16 feet thick) but not the same plane. This is considered to be an imitation of the Egyptian architecture; hence the style is called copied architecture, and among the low and bas-reliefs, rivers, trees, groups of prisoners, battles, the King in his chariot, etc., are the subjects of representation; but the material is different from that of the Egyptian architecture. Painting is just the same, and especially the King in his chariot is sculptured and painted both on the walls of Egypt and Assyria. As the fundamental rule of the art, we must not care to imitate the figures exactly or to resemble very justly its nature. The original Japanese pictures are said to be conventional representations, while the foreign pictures are naturalistic representations, and Egyptian pictures indicated roughly its condition and were conventional representations. At present, Japanese conventional pictures are approved by some foreign artists. In Japan, less than a century ago, there was no one who had any mathematical ideas or notion of mechanics. Again, even the ancient Egyptians built edifices triangular in form, which were assumed to be firmly fixed according to mechanical theory, while the edifices of Japan are always rectilinear and not in a state of equilibrium, as it changes to the form of a rhombus by wind pressure, and it inclines to the form of the letter M by the weight of snow. A triangular frame is stiff and diverges all of the pressure and weight to all directions, as that of an arch. In these points, we may say that Japanese architecture took a dark way far from all scientific and mechanical ideas, and a long period was spent, like bird architecture, without any favorable progress. In the year A. D. 720, they invented a kind of tile in order to protect the roof from wind. At the same time they discovered some materials from rock to paint timber, and they began to build stores to keep their precious goods, detached from their residences. In A. D. 794, there was a very strong and magnificent palace built at the capital Kyoto. At the next instance, a regulation was established to make many city improvements; then powerful persons and rich men built their houses newly and closely, but the number of great fires increased and

they were obliged to think about the preservation from fire, and they began to coat the reed or bamboo framed partition with slimy earth. In the beginning of the eighth century they invented plaster, which was composed of lime, sand, straw, weeds and water; and they used to coat two or three feet thick for the outside of stores and three or four inches for dwelling houses, as they thought this was the best material to resist fire. They conceived some faint idea of technic principles, but still there was no perfect building accomplished with the technic principles, æsthetic principle and phonetic adjuncts. They had no idea how to fulfill the union of all technic principles, such as mass, stability, durability, material, construction, warming, ventilation, lighting, proportion, form and ornament.

Architecture as a technic art, is practical in the same progressive principle, as all its sister arts. It is hardly as individual as music, because its forms and colors are permanent and capable of being repeated, with such improvements as each experiment suggests, in every subsequent building, but when it attempts the phonetic form of utterance, these are seldom so absolutely integral that they cannot be separated from the building and judge of a part. A Greek temple or a mediæval cathedral without painting and sculpture, may be poor and inanimate but still so

The number of gates and temples at Nickko is about twenty, and the annual number of visitors exceeds 100,000.

In 1790, a great building was erected as a seminary. In 1852, a massive and strong fortification was built in the Gulf of Tokio.

The Japanese took pleasure in building temples and churches, and in ornamenting them with painting and sculpture. Year by year they increase in number. At present the number of temples exceeds a third of a million, and there are about 72,000 churches. They appear to understand a great and noble want in human nature, "the love of beauty."

Generally, architectural style is influenced by many reasons, namely:

- 1st. By material.
- 2nd. By climate.
- 3rd. By natural character.
- 4th. By natural growth.
- 5th. By fashion.
- 6th. By conquest.
- 7th. By commerce; and
- 8th. or lastly, by alliance.

In 1860, as soon as the port of Yokohama, Japan, was unlocked for commerce with other civilized nations, bricks began to be manufactured—cement being imported. Stores and houses of brick became fashionable. So, suddenly, was architecture introduced and the port of Yokohama changed month by month to foreign styles, and at present about one-third of the buildings are of foreign styles. In 1868, the Emperor moved into the new castle at the present capital, Tokio, from the old capital, Kyoto. In 1873 there was a great fire in Tokio, and the castle was destroyed. Brick buildings were introduced in Tokio from

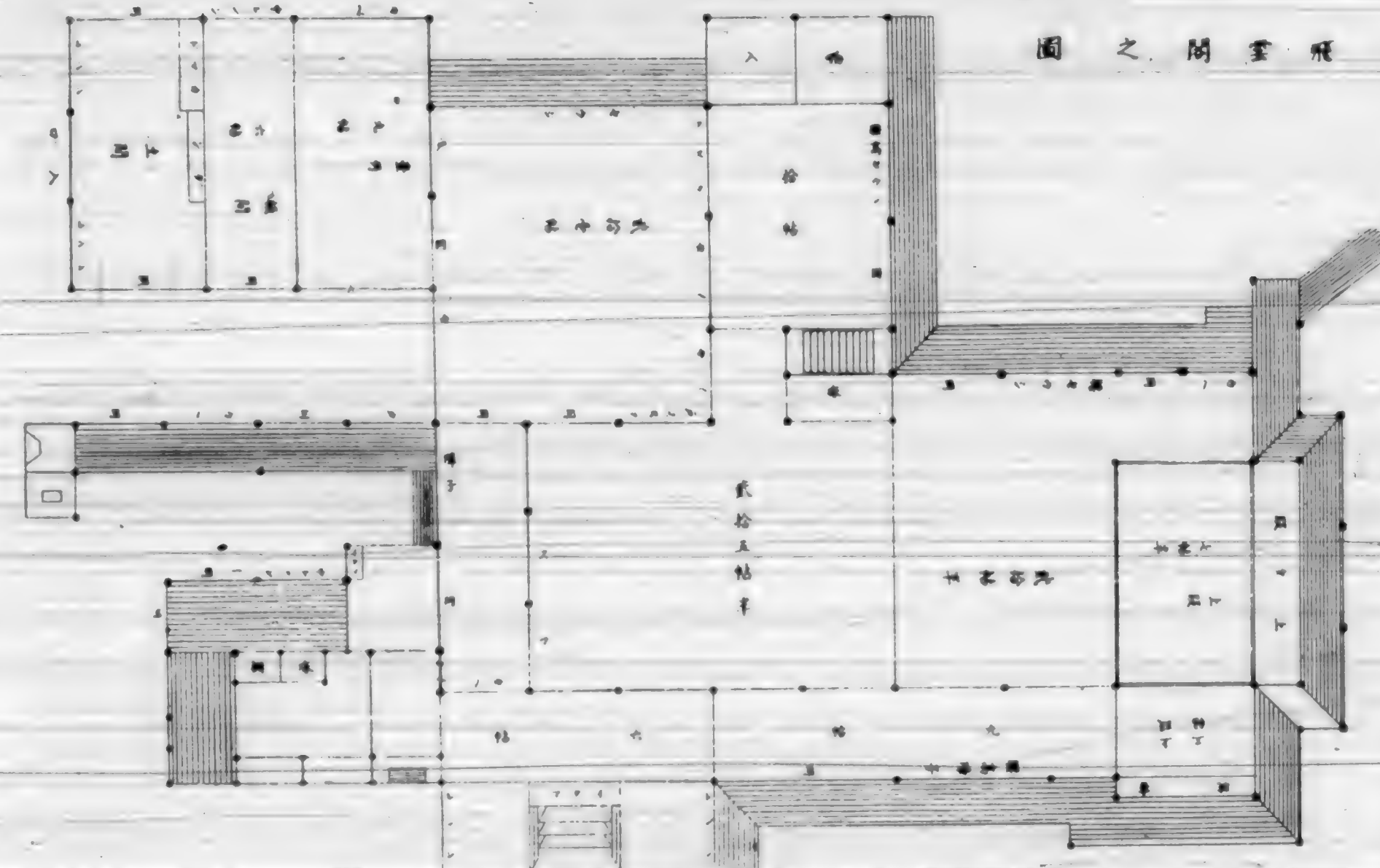


Plate No. 1. Plan of 16 Century Villa.

beautiful in its form, so grand in its mass and so imposing in its durability, that in its technic, æsthetic form alone, it may command our admiration, more perhaps than any other work of human hands except, of course, as said before, the highest intellectual form of phonetic art. In 1316 a very large edifice was built as a Public Library, to accommodate several hundred people. In 1397, a rich and powerful nobleman built a golden villa, finishing all parts with a thin gold coating. In 1587, a celebrated strong castle was built at Osaka, and it still remains there. In 1629, a great civil engineering work, or a long canal of about thirty miles, was constructed to convey pure water to the present capital, Tokio. This work gives a great happiness to the citizens, and some European engineers approve of it justly as a scientific idea. In 1650, a most splendid temple was built in Nickko. Its degree of painting and sculpture is so excellent that we cannot find such fine art in any other place; the building materials are said to have been sent from several parts of the country, and its construction appears to be extraordinarily complicated. Especially, the five-storied tower is considered to be constructed scientifically. It has a fine foundation, the large central post resting on a large granite stone mass and is balanced but not fixed rigidly. This is the most costly building in Japan.

Yokohama, and the central part of the Kyobashi district is occupied with foreign brick buildings; beside those, twenty private residences and seventy public buildings are built now.

As I told you, the progress of architecture was very slow until the Japanese began the business of commerce with the Americans and Europeans, who informed us of scientific theories and interesting practices, and at present every matter is going on at the full speed of progress. Thus, the length of railways exceeds 1,400 miles, the length of telegraph lines is about 70,000 miles; letters through the post office amount to 120,000,000; number of ships, above 500 tons, is 69; and a half ton of gold, 3 tons of silver, 1 ton of copper, 2 tons of iron, a quarter of a ton of lead and 1,000 tons of coal were obtained from the several mining districts; but the number of mining districts will increase from the influence of earthquakes, which cause physical and chemical communication between the elements by cracking the interior beds of the earth. The number of prisons was 195, and the number of prisoners 72,000; number of schools was 25,000, and the number of students was 3,000,000 last year.

There will be a summary description of Japanese architecture. Electrical and civil engineering works of America are already introduced in Japan but architectural designing, which gives a