

THE VACAVILLE UNION HIGH SCHOOL.

THE cut here represented of the new Union High School Building now being erected in the town of Vacaville, for the Vacaville Union High School District, from the drawings of Cunningham Bros., Architects of Oakland, which were accepted some months past. As the above firm are specialists in school house architecture, the District is assured of a modern building, with rooms properly proportioned, amply lighted, and well ventilated.

The plans contemplate a two-story frame structure of Venetian-Renaissance design. The building will have a frontage of 120 feet, with a maximum depth of sixty-seven feet. There will also be a basement under the entire build-

ing, containing lavatories, heating and ventilating plant, recreation rooms, etc.

The main entrance leads to a large entrance hall, on one side of which opens the principal's office, and on the opposite side, the library. The main corridor, will be ten feet wide in the clear, with three class rooms opening off it on the first floor, two class rooms, chemical and physical laboratories, and a large assembly hall, on the second floor. Teachers' lunch and dressing rooms, lavatories, hat and coat rooms, etc., are also provided. The unilateral system of lighting, is used in class rooms throughout. Special attention has been paid to the heating and ventilating. California yellow pine, will be used throughout for the interior finish.

The building is now enclosed and it will require about fifty days for its final completion.



THE VACAVILLE UNION HIGH SCHOOL. CUNNINGHAM BROS., ARCHITECTS, OAKLAND, CAL.

HEATING, VENTILATING AND CLOSETS.

The Board determined from the start to incorporate the most modern and practical Heating, Ventilating and Sanitary work and appointed a committee of three to personally inspect the workings of the various systems offered.

As a result of this inspection the W. Morgan & Co's. Heating and Ventilating System and also their Ventilated Flushing Water Closet System was adopted complete.

The system is applied in a very systematic manner, occupying but a small portion of the basement, leaving ample play rooms.

A double air warmer or furnace is located at the base of the flues supplying fresh air to the rooms above, these flues drawing their air supply from a brick warm or cold air chamber, which in turn draws its supply from fresh air rooms and windows located on each side of the basement. A powerful ventilating shaft 4x5 feet and 60 feet high draws the foul air out of each room by means of vent flues leading from each room to the base of this main shaft, the amount of exhaust is regulated by a small stack heater placed in the shaft.

By this arrangement each class room has its own independent fresh air supply and foul air exhaust flue, the teacher or occupant of the room having control of the temperature by means of a "heat regulator" which admits either warm or cold air through the same flue.

The practical workings of this system can better be determined by the ten guarantees of the company two of the most important reading as follows

"That each room shall have a continuous fresh air supply—warm or cold—so that if any room should become overheated the temperature can be reduced at the rate of three degrees for ever ten minutes, without opening doors or windows."

"That said apparatus shall secure good ventilation in all rooms, the capacity of the plant being sufficient to supply enough fresh air to each room to renew the entire volume of air in said rooms from four to six times per hour, without harmful draughts as from open doors or windows."

One of the most important features of this system (different from anything else offered) is the peculiarly constructed furnace, which makes it impossible to "over-heat" the air,

the large flange radiating surface insuring an increased volume of air at a decreased temperature.

In the rear basement rooms are found the boys' and girls' closets.

This closet system is most perfect in operation, and a combination of air and water is used, the latter to wash or flush the troughs and the former to draw all foul odors or gases through the closet vault, and expel same into the open air at the top of the building, keeping these lavatories clean and healthy at all times.

From the practical workings of this entire system in the various school buildings inspected by the committee and from the brief description as herein given it will be apparent that The Vacaville Union High School Building will be one of the foremost in its Modern Sanitary Appliances.

THE WORLD'S ARTISTS INVITED TO COMPETE.

PLANS FOR A UNIVERSITY—MUST BE IMPOSING, SERIOUS AND NOBLE—THE TRUSTEES OF MRS. HEARST'S MUNIFICENCE MAKE PUBLIC THE CONDITIONS.

THE TRUSTEES of the Phebe A. Hearst architectural plan of the University of California have issued their invitation to the architects of the world to co-operate "in the preparation of a permanent, general plan of the buildings and grounds which are to compose the University of California."

The invitation is in the form of a handsomely printed pamphlet of forty pages, entitled "Programme for an International Competition for the Phebe Hearst Architectural Plan of the University of California." It opens as follows:

The trustees appointed by Mrs. Phebe A. Hearst hereby invite the co-operation of the architects of the world in the preparation of a permanent, general plan of the buildings and grounds which are to compose the University of California, in Berkeley, near San Francisco, Cal.

J. B. Reinstein, James H. Budd, William Carey Jones. Trustees of the Phebe Hearst Architectural Plan of the University of California. Dated at San Francisco, Cal., December 3, 1897.

The competition is to be double, a preliminary and final. The preliminary is open to the world. The final will be limited to those whose work in the preliminary is decided by the jury of award to be of such worth and merit as to entitle them to be considered in the final competition. All plans submitted for the preliminary competition must be deposited with the United States Consul at Antwerp, Belgium, before July 1, 1898.

Rules have been adopted so that the members of the jury of award will not know who is the author of any plan. All plans that the jury do not consider worthy of being retained will be returned to their authors. The plans retained will become the property of the University of California, but the name of a successful author will not be made public without his consent. At least ten plans will be retained, and if only that number the author of each will receive \$1500. If not exceeding fifteen plans are retained \$1200 will be paid to each, and if more than fifteen are retained \$1000 will be paid to each.

Competitors in the final competition who desire to study

the site of the proposed buildings on the ground will be provided with transportation and expenses for the journey from their residences to San Francisco and return. A total sum of at least \$20,000 will be devoted to premiums for the best plans in the final competition, and of this at least \$8000 will be awarded to the plan classed as No. 1. The ultimate execution of the plan is entirely in the hands of the University, and competitors are informed that a contract with any of those receiving an award "will be a desirable consequence of the competition, but in no wise a condition thereof." The preliminary plans retained will be publicly exhibited at the Mark Hopkins Institute of Art.

The jury for the preliminary competition will be international, being composed of these members: Messrs. R. Norman Shaw, 6 Ellerdale Road, Hampstead, London; J. L. Pascal, 8 Boulevard St. Denis, Paris; Paul Wallot, 6 Hahnel-Strasse, Dresden; Walter Cook, 674 Broadway, New York, N. Y.; J. B. Reinstein, 217 Sansome street, San Francisco, Cal. For the final competition four architects will be added to this jury, who will be chosen by its members, aided by lists of names submitted by successful preliminary competitors. Competitors successful in the preliminary competition will have not less than six months after the decision in the preliminary competition within which to send in their plans for the final competition.

Eight thousand copies of this programme have been issued, four thousand copies in the English language, two thousand in the French and two thousand in the German. The programmes, documents, pictorial aids and the material necessary for the competitors have been distributed to the Ministers of Foreign Affairs of the Argentine Republic, Brazil, Chile, China, Japan, the Minister of Public Instruction and Fine Arts in Turkey, the technical societies, respectively, of Spain, Sweden and Roumania, and the leading organizations of architects in Austro-Hungary, Belgium, Canada, Denmark, Germany, Great Britain and Colonies, Holland, Italy, Mexico, Portugal, Russia and Switzerland. In the United States they have been sent to the Secretary of State of every State, to chapters of the American Institute of Architects in Boston, Brooklyn, Buffalo, Chicago, Cincinnati, Cleveland, Denver, Detroit, Indianapolis, Kansas City, Los Angeles, Lynchburg, Va.; New York, Philadelphia, Pittsburgh, Providence, Rochester, San Francisco, Seattle, St. Louis, Washington, and to the Mayors of the other principal cities.

It is stated that the various buildings now standing on the grounds need not be taken into consideration; nor need present paths or roads be considered. The general grouping of requirements includes a library with a capacity for 750,000 volumes, a gymnasium with separate halls and apartment accommodation for men and women students, and separate swimming baths for each, two auditoriums, of which one shall seat 5000 people, dormitories, club-houses for students and faculty, an elaborate military establishment, an infirmary, and all suitable structures and provisions for the fifteen departments thus far contemplated by the University.

While there are no limitations on the materials to be used, it is stated that California abounds in beautiful and durable building stones. The programme closes with a scientific abstract of climatic conditions at the University of California for the past ten years. Requests for further information may be addressed to Trustees Phebe Hearst Architectural Plan, University of California, 217 Sansome street, San Francisco, Cal.

CITY BUILDING NEWS.

- Bush** near Powell. Three-story frame; owner, John G. Fezhl; contractor, I. Casper Zwerlein; signed, Jan. 4; filed, Jan. 8; cost \$5775.
- California** and Montgomery. Alterations and additions; owner, Thomas J. Clunie; architects, Curlett & McCaw; contractor, Wm. Linden; signed, Dec. 18; filed, Dec. 14; cost \$16,800.
- Clara street, No. 141.** Additions and alterations; owner, K. S. Guglielmetti; architects, Oakley & Jordan; contractor, C. A. Holm; signed, Nov. 10; filed, Dec. 27; cost \$1000.
- Clayton near Fell.** Two-story frame; owner, James T. Gaynor; architects, Shea & Shea; contractor, B. Dryer; signed, Dec. 30; filed, Jan. 3.
- Dolores** near 17th. Mill work, etc. for four-story and additions; owner, College of Notre Dame; architect, C. J. L. Devlin; contractor, J. W. Smith; signed, Dec. 17; filed, Dec. 17; cost \$23,988. Concrete, etc.; contractors, Staack & Grunzel; signed, Dec. 17; filed, Dec. 17; cost \$2570. Excavations, brick work etc.; contractors, Peacock & Butcher; signed, Dec. 17; filed, Dec. 27; cost \$2284. Plumbing; contractor, W. F. Wilson; signed, Dec. 17; filed, Dec. 17; cost \$1817. Lathing and plastering; contractor, Martin Carrick; cost \$2380. Hot Water Heating; contractors, Holbrook, Merrill & Stetson; cost \$3597. Painting, etc.; contractors, Joe Cahill & Co.; cost \$1745.
- Eddy** near Powell. Brick addition to front of Tivoli Theatre; cost \$1500.
- Eleventh Ave. near Pl. Lobos.** Cottage; owner, Mrs. Carrie C. Ayres; contractor, Z. O. Field; signed, Dec. 20; filed, Dec. 23; cost \$1087.
- Ellis and Pierre.** Two-story frame; owner, Margaret O'Brien; contractor, H. E. Kronnek; signed, Dec. 22; filed, Dec. 22; cost \$4500.
- Fulton and Webster.** Alterations and additions; owner, Henry Schmidt; architect, O. Everett; contractor, Jeremiah T. O'Brien; signed, Jan. 5; filed, Jan. 5; cost \$2814.
- Geary** near Mason. Additions and alterations; owner, Charles Schroth; architect, A. W. Marquis; contractor, John Wireo; signed, Dec. 20; filed, Dec. 22; cost \$2307.
- Jackson** near Larkin. Alterations and additions; owner, Mrs. Margaret Hyland; architects, Mahoney & Ryland; contractor, S. Saywell; signed, Nov. 2; filed, Dec. 16; cost \$2520.
- Jackson street, No. 734.** Steel work for a tank frame; owner, M. Schuppert; architect, A. C. Lutgens; contractor, H. Ralston; signed, Dec. 27; filed, Dec. 27; cost \$1025.
- Kansas** near Saloma. To build; owner, Mary E. Trowbridge; architect, J. T. Kidd; contractors, Blanchard & McKenzie; signed, Dec. 20; filed, Dec. 21; cost \$1168.
- Laguna** near Grove. Alterations and additions; owner, Judah Ross; architect, M. J. Lyon; contractor, P. Maloney; signed, Dec. 28; filed, Dec. 31; cost \$2850.
- Market and Third.** Galvanized iron tile for roof; owner, Phebe A. Hearst; architect, A. C. Schweinfurth; contractor, W. Heidt; signed, Dec. 22; filed, Dec. 22; cost \$1300.
- Market and Third.** Babcock and Wilcox boilers; owner, Phebe A. Hearst; architect, A. C. Schweinfurth; contractors, Babcock & Wilcox Co.; signed, Dec. 31; filed, Jan. 10; cost \$13,144.
- Allister and Franklin.** Two three-story frame buildings; owners, Jos. and Christina Wannermaker; architects, Sadfield & Kohlberg; contractor, Jos. Bader and Jos. Fuchs; signed, Dec. 13; filed, Dec. 14; cost \$12,750. Plumbing; contractor, Henry Hufschmidt; signed, Dec. 13; filed, Dec. 14; cost \$1595.
- McAllister near Fillmore.** Additions; owner, Theresa E. Lee; contractor, C. V. McDonald; signed, Dec. 17; filed, Dec. 18; cost \$1000.
- Montgomery and California.** Additions and alterations; owner, Thomas J. Clunie; architects, Curlett & McCaw; contractors, Duffey Bros; signed, Dec. 17; filed, Dec. 21; cost \$2780.
- O'Farrell** near Jones. Three-story frame; owner, A. McFarlane; architects, Coxhead & Coxhead; contractors, Hannah Bros; signed, Dec. 31; filed, Jan. 4; cost \$4470.
- Post** near Octavia. Alterations and additions; owner, Leonora M. Coleman; architects, Jesson & Holland; contractors, J. J. Jensen & R. Morgan; signed, Dec. 17; filed, Dec. 17; cost \$1857.
- Post** near Laguna. Alterations and additions; owner, Jette Hamburger; contractors, Campbell & Pettus; signed, Jan. 4; filed, Jan. 5; cost \$5620.
- Pierce** near Broadway. Two-story frame; owner, Maud Shirley Gregg; architect, Frank T. Van Trees; contractors, Williams Bros; signed, Jan. 8; filed, Jan. 12; cost \$4420.
- Scott** near Pacific Ave. Two-story frame; owner, W. P. Redington; architect, E. A. Mathews; contractor, Edward Leiter; signed, Jan. 4; filed, Jan. 6; cost \$7343.
- Second and Mission.** Fire proof floors, etc.; owners, Wells Fargo & Co; architect, Percy & Hamilton; contractor, Richard Keating; signed, Dec. 30; filed, Jan. 3; cost \$37,755.
- Sixth Ave. near California.** Six two-story frames; owners, Marcuse & Remmel; days work; cost \$18,000.
- Stevenson and First.** Alterations and additions; owner, L. Schoenberg; architect, Sylvain Schnattacher; contractor, John Flaherty; signed, Dec. 18; cost \$1040.
- Stockton street and Stockton Place.** Alterations and additions; owner, W. F. Wilson; architect, N. Blaisdel; contractor, R. C. Stiller; signed, Jan. 4; filed, Jan. 5; cost \$1220.
- Tenth** near Howard. Two-story frame; owner, Cascade Laundry Incorporation; architect, H. Gelfuss; contractor, F. W. Kern; signed, Dec. 22; filed, Dec. 22; cost \$4500.
- Van Ness** Ave. and Clay. Fence work; owner, Claus Spreckels; architects, Heid Bros; contractor, S. F. Novelty Works; signed, Dec. 20; filed, Dec. 31; cost \$1670.
- Washington** near Buchanan. Two-story frame; owner, Wm. L. Grestie; architect, E. A. Mathews; contractor, A. T. Ruch; cost \$7074.

COUNTRY BUILDING NEWS.

OAKLAND

At the last meeting of the Board of Public Works, of Oakland, the plans of Cunningham Bros., architects of that city, for the proposed new fire station, were accepted.

The building will be a two-story brick structure, 40 feet front with a depth of 76 feet, in the Spanish-Renaissance style. The front will be of buff pressed brick, with red trimmings. The estimated cost is \$7500. Bids are to be called for within a week.

AUBURN

Building operations in Auburn at this season of the year is not very brisk. A. L. Kennison is just completing a large building 50x70 two stories high, covered with "steel brick" siding. The lower story will contain a store, saloon and bottling works and upper story will be a dance hall. Cost about \$3500.

Chas. Barker has just inclosed a neat two-story cottage; cost about \$2000; architect, A. D. Fellows; owner Chas. Barker.

Guy Walsh has ready for plaster a neat one-story cottage.

E. B. Beecher will build a cottage on his ranch near town early this Spring.

S. F. Woodworth of Clipper Gap will build a soap and candle factory at Clipper Gap in the Spring.

Burt & Locher have purchased a lot and will erect a warehouse upon the same this Spring.

TUOLUMNE

The Board of Supervisors of Tuolumne County has accepted the plans of Wm. Mooser & Son of San Francisco, for a new Court House Building. The area of the main structure will be 89x47 1/2 feet, and it will have a wing 30 feet square. The height to the apex of the tower will be 88 feet.

The edifice will be three stories, with the main edifice leading to the second floor. Stone will be used for the lower story, the walls above being in Roman brick. Construction will be commenced in April.

LOS ANGELES

Architect R. B. Young, in addition to the plans he has prepared of the Catholic church and parochial school at Pasadena, is now at work on the drawings of an academy, for the same denomination, which will be built on the school site on the corner of Walnut and Fair Oaks avenues. These buildings will be equal to any that have been erected in Pasadena during the past year.

The Los Angeles' Board of Supervisors have directed the clerk to advertise for bids for the construction of a tunnel through the divide at the head of the Poway grade in Sec. 35, twp. 14 south, range 2 west, in accordance with plans and specifications now on file in the county surveyor's office; the bids to be opened by the board upon February 9, 1898.

DUNHAM, CARRIGAN & HAYDEN CO.

17 and 19 BEALE ST., San Francisco Cal.

We show here an illustration of our AMERICAN SLIDING DOOR HANGER for which we claim unusual advantages, great saving in time and expense, and superior excellence in operation, together with the following features not obtained or claimed in other hangers.

TRACKLESS—We obviate the use of a track above or below, and the special framing necessary where a track is used.

NO WHEELS—There are no wheels to bind by reason of warped or sagging track. The movement is perfectly PARALLEL and insures against binding.

NOISELESS—The operation is noiseless and extremely easy.

DOORS EASILY ADJUSTED—The door can be readily adjusted plumb, raised or lowered by drawing them into the opening which gives easy access to the adjusting screws.

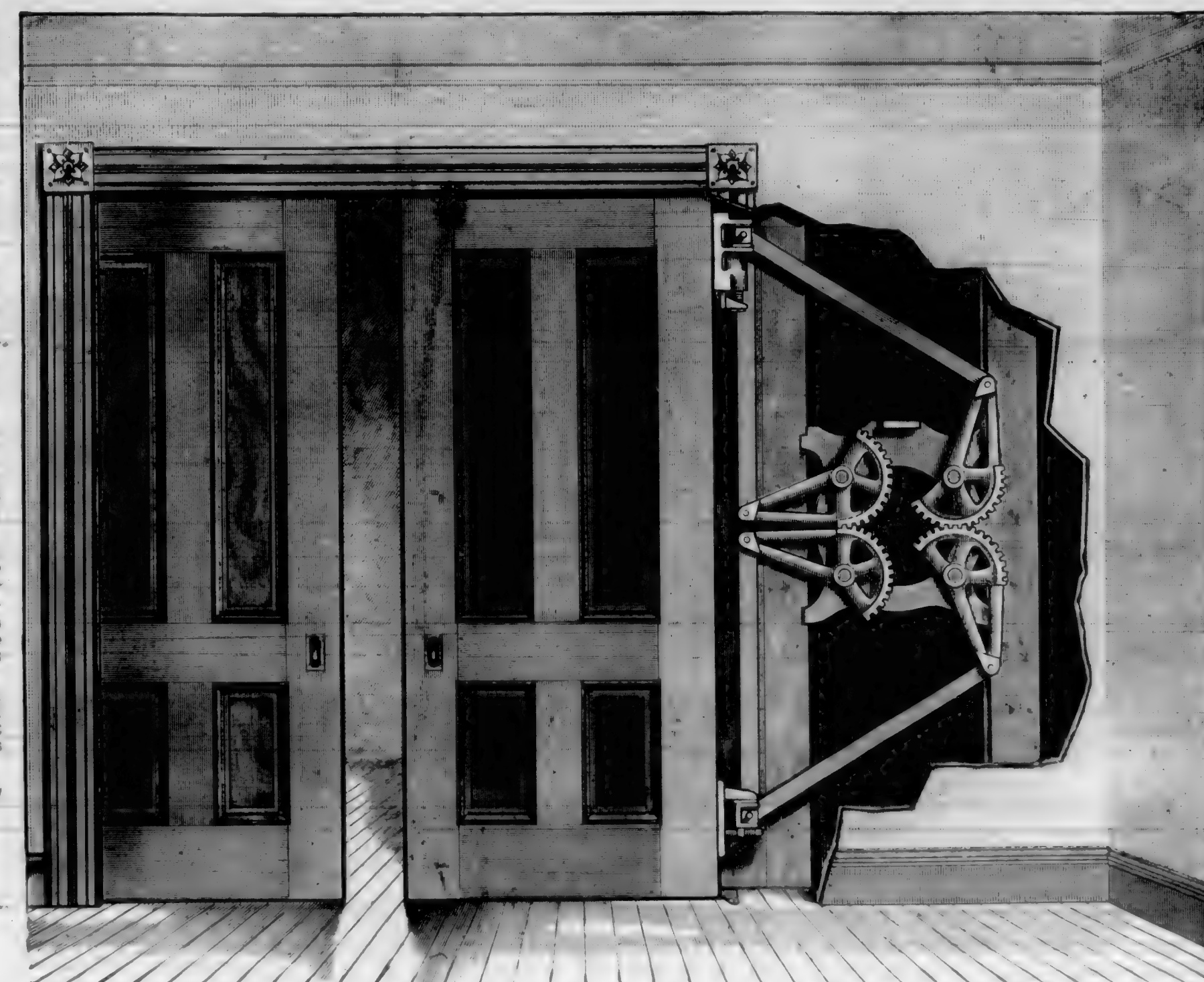
QUICKLY PUT UP—The Hangers can be put up in one-third the time required for overhead hangers.

SUBSTANTIAL—The parts are made to carry three times the weight of doors of the sizes given.

ONE PACKAGE—We pack the Hangers fully assembled and ready to attach, in one package, including all bolts and screws necessary.

See a full size working model at our store.

WE SELL
The Yale & Towne Mfg Co.
CELEBRATED
YALE LOCKS.



The California Architect, \$3.00 Per Year.

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SMITH & YOUNG BUILDING SUPPLIES

OUR SPECIALTIES:

FOUNDATION AND WALLS

Southern Marble Co.
Marble Hill Georgia, Georgia White Serpentine. Fire and Electric Proof

Sandstone. [BUFF] GOODRICH QUARRY

Joist Hangers. GOETZ PATENT Forged Wrought Iron

Lath. SHEET STEEL Painted and Unpainted WIRE LATH. G. & B. System

Mortar Stain. PECORA For coloring mortar, cement, and sand finish

Paper. [BUILDING] S & Y BRANDS Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9 and 14

Wall Ties. MORSE'S PATENT

McDonough Weather Strips.
Acts as a stop and prevents window from rattling.

Alpine Cement Plaster
For brown and white coat

Porcelite Enamel Paint
Does not craze or crack

Oils. S & Y Pure LINSEED Triple Boiled, Raw and Varnish

Varnish. S & Y TRANSPARENT

Filler. S & Y LIQUID AND PASTE

Deadening Felt. S & Y BRANDS 1, 1 1/2 and 2 lbs. per sq. yd.

Ornaments. PRESSED WOOD

Casing Blocks
Corner, head, center and base blocks

Carvings. [WOOD]

INTERIOR FINISH

Ceiling. [STEEL CEILING]

Chimney Hood. CLAWSON'S PATENT To prevent smoky fire-places, and increase heat.

Mouldings. TURNED, CARVED AND PRESSED

Shingle Stains. DEXTER BROS. PERMANENT COLORS. A PERFECT PRESERVATIVE

Paints. S & Y EXTRA QUALITY "GRAPHITE" For metal and wood MIXED ROOFING AND HOUSE PAINTS

Roofing
Slate, Mastie and Steel

EXTERIOR FINISH

Brick Preservative
For water-proofing both brick and sandstone; does not change color of brick or stone. Also furnished with pigment to give even color to pressed brick

Roofing Cement. S & Y BRAND For repairing leaks about chimneys, sky lights, copings, and old tin and shingle roofs.

OTHER SPECIALTIES

Infusorial Earth
Fire proof. Used for boiler and pipe covering

Soapstone. CRUDE, GROUND AND ROLLED

Mineral Wool
For fire-proofing and deadening

Chas. J. Waterhouse

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TURNED ART MOULDINGS PRESSED

SAM'L CABOT'S

CREOSOTE SHINGLE AND RUSTIC STAINS
SHEATHING AND DEAFENING "QUILT"
MORTAR STAIN PULPS. BRICK PRESERVATIVE.

N. & G. TAYLOR CO.'S

"OLD STYLE" ROOFING TIN

"THE TAYLOR ROOFING TIN"

"TAYLOR'S COLUMBIA" ROOFING TIN

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The Van Dorn Iron Works Co.'s

VAN DORN

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JOIST HANGER

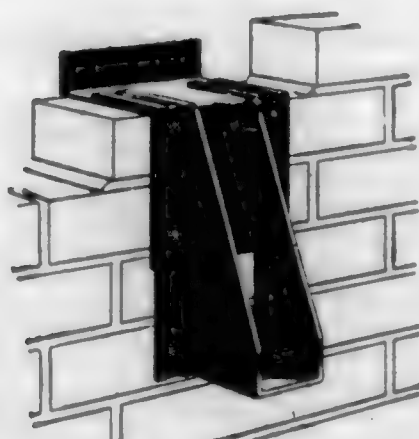
No. 1-Steel joist hanger
for wooden header

HAS NO EQUAL.

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Window Screens, Screen Doors.
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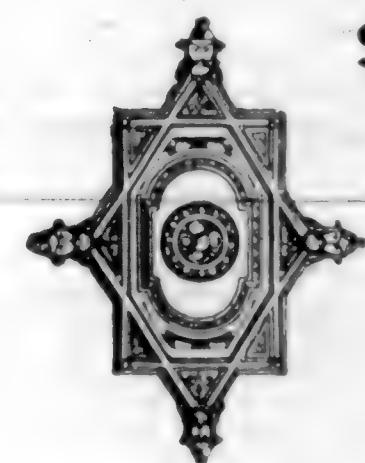
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CORNER NEW MONTGOMERY AND MISSION STREETS.

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S. H. Kent, President.	72	Mulcahy, J., mason and builder.	55
Thos. W. Butcher, Vice-Pres.	180	Nichols, Edward F. & Co., hardwood lumber.	205
Jas. A. Wilson, Sec.	180	Nichols Bros. & Co., planing mill.	20
Edw. B. Hinds, Treasurer.	180	Nutting, C.	49
DIRECTORS:		Oakland Art Pottery Works.	133
S. H. Kent	John Tuttle	O'Brien, Jas. J., carpenter and builder.	107
Jas. A. Wilson	Gus. V. Daniels	O'Brien, P. R. & Son, plumbers.	215
Thos. McLachlan	C. C. Morehouse	O'Sullivan, D., mason contractor.	40
Thos. Elam	R. Herring	Pacific Bridge Co.	310
Thos. W. Butcher	Edw. B. Hinds	Pacific Refining & Roofing Co.	192
J. R. Tobin.		Pacific Lumber Co.	130
COMMITTEES:		Pacific Rolling Mills.	192
ROOMS.		Pachiz, Gus. J., electrician, etc.	282
J. R. Tobin	R. Herring	Palace Hardware Co., builders' hardware.	282
E. B. Hinds	Thos. Elam	Paraffine Paint Co., roofers, building paper.	144
T. McLachlan	T. W. Butcher	Patent Brick Co., brick.	173
MEMBERSHIP.		Peacock & Butcher, masons and builders.	125
ARBITRATION.		Petersen Brick Co., original red pressed brick.	68
Jas. A. Wilson	John Tuttle	Peterson, H. M. & Co., concrete.	245
Gus. V. Daniels	Gus. V. Daniels	Pleasant, Henry, mason and builder.	299
FINANCE.		Pool, Jas. R., house mover and raiser.	217
C. C. Morehouse	Gus. V. Daniels	Rae, James, stone contractor.	56
John Tuttle	John Tuttle	Ralston Iron Works, contractors for stone work.	165
Box No.		Reichley Geo., contractor and builder.	109
Abrahamson, P., patent ventilators.	123	Reigle & Jamieson, machine white washing.	240
Adams, John G., contractor and builder.	270	Reinhardt Brick Co., pressed stock and common brick.	278
Alameda Brick & Tile Co., brick.	170	Rice, Richard, plumber.	253
Arizona Sandstone Co., building stone.	326	Richardson & Gale, masons and builders.	328
Bassett Bros., contractors and builders.	180	Richmiller, Geo., door opener.	355
Bass-Huter Paint Co., paints, oils and varnishes.	180	Riley John F., masons and builders.	329
Bauman Bros., contractors and builders.	236	Ringrose, E., mason and builder.	18
Beck, Adam, mason and builder.	11	Rohlfson & Gillespie, contractors and builders.	111
Bell, Wm., contractor and builder.	17	Rocklin Granite Co., granite work.	69
Bibb Lumber Co., D. H. lumber.	214	Rosenbaum, Fr. H., glass.	96
Billingham Bay Lumber Co., lumber.	214	Rodino & Bianchi, marble.	219
Boyd, Robert, mason and builder.	77	Sacramento Transportation Co., patent and stock.	332
Brady, M. V., mason and builder.	34	San Francisco Lumber Co.	291
Brady, O. E., mason and builder.	390	San Francisco Novelty and Planing Works.	291
Brennan, D. J., mason and builder.	51	San Francisco Planing Mill, Wm. Crocker.	12
Brennan James, plasterers.	159	San Joaquin Brick Co., brick.	28
Britt, James E., plumber.	36	San Jose Brick Co., brick.	5
Brodie, R., iron works.	280	Sanders, J. S. W., contractor and builder.	25
Burden, W., mason and builder.	280	Schroeder, Wm., art glass.	63
Burnham, Stanford Co., planing mill.	28	Scott & Van Arsdale Lumber Co.	193
Burrell, E. H., building material.	146	Smith, M. P., carpenter.	304
Burt, W. J., house mover.	286	Smith, J. W., carpenter.	71
Butler, Wm. A., mason and builder.	255	Smith & Young, building supplies.	374
California Art Glass Works.	83	Smith & Quimby, street contractors.	67
California Electrical Works.	223	Smith, E. L., lime and plaster.	101
California Mills, planing mills.	300	Snook, W. S. & Son, plumbers.	372
Campbell, Alex. L., contractor and builder.	105	Soule Bros., carpenters.	61
Carey, J. E., brick manufacturer.	282	Steiger, A., Sons, architectural terra cotta.	134
Carle, Silas, contractor and builder.	286	Stevens, F. M., patent chimneys.	15
Cartwright, D. S., teaming.	10	Stratton, Jno. S., house mover.	362
Central Lumber & Mill Co., lumber and planing mill.	345	Sullivan, J. F., painter and decorator.	1
Chatham, Wm., contractor and builder.	345	Sullivan, Tim, carpenter.	83
Chisholm, G., contractor and builder.	44	Sullivan, M. F., grading and teaming.	148
Clark, N. & Sons, terra cotta, etc.	394	Sweeney, Daniel, carpenter.	335
Clawson, J. E. & Co., patent chimneys.	98	Sweeney, G. G., plumber.	135
Coghlan, Frank, plasterer.	91	Tacoma and Roche Harbor Lime Co.	289
Collin & Gunn, lathers.	114	Tay, Geo. H., Co., plumbers supplies.	321
Concepcion Wm., contractor and builder.	24	Tobin, J. H., plasterer.	173
Conlin & Roberts, metal roofers.	90	Towle & Broadwell.	246
Coppleiers & Mockel, grill work.	100	Trotter, John, contractor and builder.	281
Cowell, H. & Co., lime, cement, fire brick, etc.	7	Tupper, O. M., lime.	281
Crichton, Peter, contractor and builder.	339	Tuttle, John, teamster, plasterers' supplies.	79
Crocker, Wm., planing mill.	12	Union Lumber Co., lumber.	335
Cronan, Wm., Eagle Sheet Metal Works.	313	Vermont Marble Co.	335
Currie, Robert, contractor and builder.	143	Vulcan Iron Works.	284
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Curry, J. M., stone dealer.	35	Wagner, J. Ferd., mason and builder.	181
Daniels, Gus. V., painter and decorator.	85	Walker, George H., carpenter.	367
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Davis, Geo. & Son, house movers.	237	Washington & Moeen Milling Co.	272
Day, Thos. H. & Son, contractors and builders.	131	Washington Street Planing Mill.	48
Degan, Patrick, stone contractor.	366	Waterhouse, C. J.	78
Depeew, Chas. M., planing mill.	19	Watson, W. C., plasterer.	90
Dillon, David, teamster and contractor.	139	Western Granite & Marble Co.	316
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Dougherty, J. P., plumber.	351	White Bros., carpenters.	257
Dunbar, Wm., mason and builder.	364	White Bros., hardwood lumber.	145
Dunham, Carrigan & Hayden Co., hardware.	4	Whittle, H., mason and builder.	60
Dunlop, Chas., plasterer.	59	Williams, F. A., contractor and builder.	178
Dwyer, L. J., painter and decorator.	197	Williamson, H., plumber.	280
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		Wilson, James A., mason and builder.	221
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		Worrel, C. R., mason and builder.	2
		West Coast Wire Works.	273
		Western Expanded Metal & Fire Proofing Co.	349
		Yates & Co., paints.	349

Retail Price List of Lumber.

Retail Price List of Lumber.		Dressed T. & G. Flooring, 1x6 in. 23 00 20 00	Dressed T. & G. Flooring, 1x4 in. 26 00 18 00	Dressed T. & G. Flooring, 1x6 in. 25 00 19 00	Dressed Stepping, S. 1 S. 31 00 21 00
		LATH.			
OREGON PINE. (Douglas Fir.)		1 1/2 in. x 4 ft. long.....\$ 2 00	1 1/2 in. x 4 ft. long..... 2 10		
ROUGH COMMON.		SUNDRIES.			
Ordinary Sizes to 12x12 in.		Wool Slats (Rough) 1x1 in.....\$ 7 50			
in lengths to 32 ft. inclusive..\$14 00	\$12 00	Bed Slate (Rough) 1x3 in. B. M. 13 00			
Ordinary sizes to 12x12 in.		SPRUCE.			
in lengths to 40 ft. inclusive.. 14 50	12 00	ROUGH COMMONS.			
Ordinary sizes to 12x12 in.		Box Stock, assorted widths.....\$15 00 13 00			
in lengths to 50 ft. inclusive.. 15 00	13 00	ROUGH UPPERS.			
Ordinary sizes to 12x12 in.		Rough Clears.....\$28 00			
in lengths to 60 ft. inclusive.. 17 50	13 00	Rough Selects..... 25 00			
2 in. to 4 in. x 14 in.		REDWOOD.			
in lengths to 30 ft..... 15 00	12 00	ROUGH.			
2 in. to 4 in. x 14 in.		Lumber to 6x8 and assorted			
in lengths 31 to 40 feet..... 15 50	12 00	boards.....\$16 00 \$13 00			
2 in. to 4 in. x 14 in.		Boards, 1x12 and specified			
in lengths 41 to 50 ft..... 17 00	13 00	widths..... 16 50 13 50			
in lengths 51 to 60 ft..... 20 00	14 00	Timbers, 8x8 and over..... 17 00 14 00			
2 in. to 4 in. x 16 in.		Select, 3x4 and 4x4..... 19 00			
in lengths to 30 ft..... 15 50	12 50	All other Select..... 21 00			
2 in. to 4 in. x 16 in.		No. 3 and Refuse..... 10 00			
in lengths 31 to 40 ft..... 16 00	13 00	RUSTIC.			
2 in. to 4 in. x 16 in.		1x8 and 1x10, asstd., 12 to 20 ft.			
in lengths 41 to 50 ft..... 17 50	13 50	long..... 26 00 24 00			
2 in. to 4 in. x 16 in.		1x8 and 1x10, 6 to 11 ft..... 19 00			
in lengths 51 to 60 ft..... 20 50	14 00	1x8 and 1x10, all lengths, No. 3..... 20 00			
1x3 in, assorted lengths..... 16 00	12 00	SUFFERAGE AND ROUGH—CLEAR.			
1x4 in, assorted lengths..... 15 00	12 00	1, 1 1/2, 2 in.—4, 5, 6 in. wide,			
Sizes larger than 12x12 in., as also sizes		12 to 20 ft..... 23 50			
wider than 16 in., subject to		1, 1 1/2, 2 in.—8 to 16 in. wide,			
special rates additional.		12 to 20 ft..... 26 00			
Refuse, i. e. Firewood..... 8 00		1, 1 1/2, 2 in. 18 to 24 in. wide,			
ROUGH UPPERS.		12 to 20 ft..... 29 00			
Rough Select.....\$17 00		1, 1 1/2, 2 in.—over 20 ft. long or			
Rough Clears..... 22 00		over, 24 in. wide, special price)			
Furring, 1x2 in. per. per linear ft		3, 4, 5 and 6 in.—8 to 16 in. wide,			
WORKED UPPERS.		12 to 20 ft..... 26 00			
Dressed T. & G. Flooring, 1x3 in.\$25 00\$19 00		3, 4, 5 and 6 in.—over 16 in. wide,			
Dressed T. & G. Flooring, 1x4 in. 24 00 20 00		12 to 20 ft..... 29 00			



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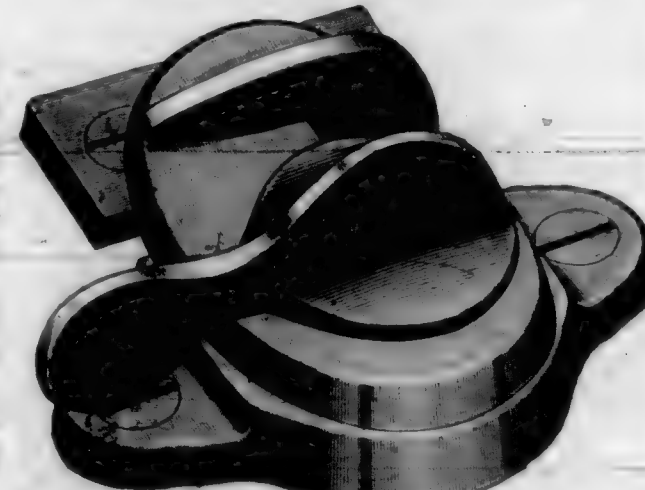
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VOLUME XIX. No. 1.

FEBRUARY, 1898.

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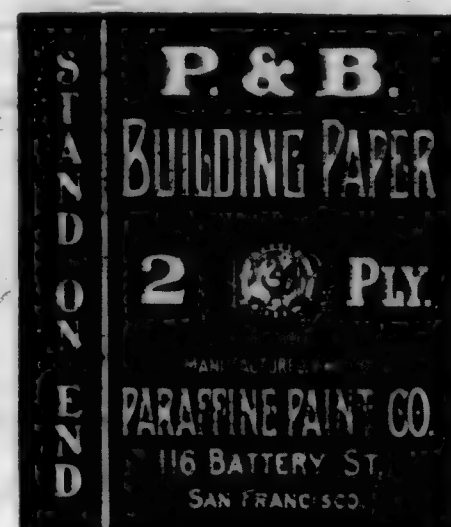
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Sample Tablets on Application.

Sold by Dealers.

Broadway west of Devisadero. All work for two-story attic and basement frame dwelling; owner, Thomas Magee; architect, Edgar A. Mathews; contractor, Ed. Leiter; cost \$8052.
California street, SE cor. of Larkin. All work for additions and repairs to frame hotel building; owner, Henry Kahn; architects, Oakley & Jordan; contractor, M. J. Savage; cost \$1023.
Clay, south line W of Laguna. All work for two-story attic and basement frame residence; owner, Caroline B. Watson (by attorney); contractor, W. H. Barger; cost \$9600.
Devisadero SW cor. of Sutter. All work, except plumbing, gas-fitting and sewers for two-story frame building; owner, John Murry; cost \$2984.
Devisadero W of Ridley. All work for a two-story frame dwelling; owner, James J. Flynn; architects, Shea & Shea; contractors, Demartini & Pagan; cost \$1995.
Eighth Ave., cor. D street. All work for a frame cottage and 600 feet of fence; owner, Levi Vanuiken; contractor, Geo. M. Saulsbury; cost \$571.
Fell, south of Broderick. All work for two-story frame dwelling; owner, Mrs. N. M. Lund; contractor, Wm. Helbing; cost \$4500.
Fremont near Howard. All work for a three-story and basement brick building; owner, M. W. Belshaw; contractor, W. J. Wissinger; cost \$13,306.
Geary street, NE cor. of Octavia. All work for additions and alterations to a laboratory; owner, Dr. Jos. C. Hirschfelder; architects, Wright & Sanders; contractor, W. J. Field; cost \$2180.

Watch this Space for Description of
some well known Article that we
must all use.

D. E. GARRISON, Jr., President. S. W. BACKUS, Secretary. C. F. RUNYON, Vice-President.
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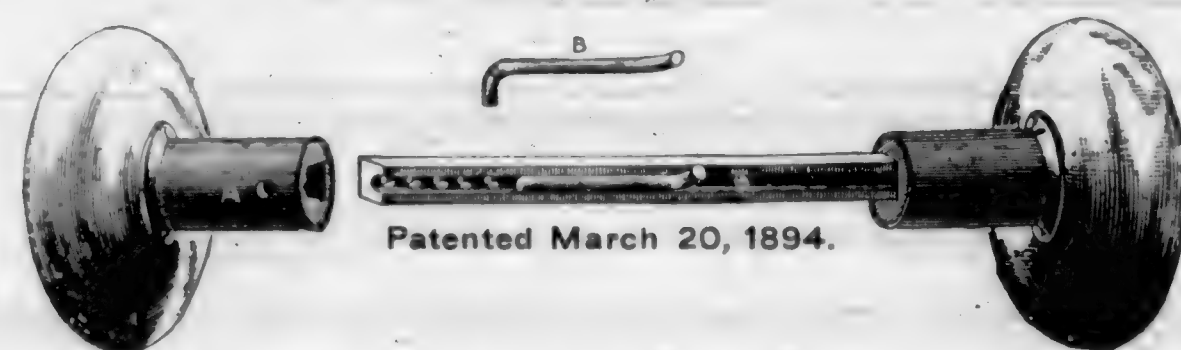
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To remove Knob, insert a small awl into Hole "A" and press Spring down, at same time pull gently on Knob.
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BUILDING NEWS.

Greenwich street, west of Laguna. All work, except mantels, gas fixtures and shades for a one-story attic and basement frame cottage; owner, F. Weissman; architect, Rudolph Hess; contractor, P. C. Rounds; cost \$1695.

Harriett near Folsom. Carpentry, sheet metal and plumbing work for one-story and basement; owner, Julius Radstone; architect, A. J. Barnett; contractor, Frank Boerner; cost \$1494.

Harriett near Folsom. Grading, brick, concrete, iron work, etc., for cellar and smoke house in basement; owner, Julius Radstone; architect, A. J. Barnett; contractor, Rhody Ringrose; cost \$1363.

Howard north of Third. Grading, brick work, granite, stone work, etc.; owner, E. McLaughlin; architect, Chas. Geddes; contractor, H. H. Larsen; cost \$6277.

Jackson north of Walnut. All work for two-story frame; owner, Geo. F. Beveridge; architects, Tharp & Holmes; contractor, Z. O. Field; cost \$8963.

BUILDING NEWS.

Laguna near Washington. Sewers, plumbing, gas fitting, conductors and marble work for frame dwelling; owner, Dr. A. Barkan; architects, Fissis & Moore; contractor, Duffey Bros; cost \$2718.

Market and Third. Painting work, etc., for seven-story brick; owner, Phebe A. Hearst; architect, A. C. Schweinfurth; contractor, J. H. Keefe; cost \$4235.

Powell bet. Eddy and Ellis. Alterations, additions and repairs to the Columbia Theatre, except painting, decorating and electrical work; owners, K. A. Denicke and F. Siebe; architect, E. Kollofrath; contractor, Charles Schutt; cost \$3100.

Sacramento west of Laurel. All work for a two-story and basement frame building, two flats; owner, A. Dahlberg; contractor, A. Dahlberg; cost \$3800.

Sagambre near Capitol. Cottage; owner, A. A. Bracken; cost \$1500.

Second Ave. south of Clement. All work for two-story frame; owner, W. H. Cameron; architect, J. W. Johnson; contractor, Marcuse & Remmel; cost \$2400.

BUILDING NEWS.

Seventh and Eighth streets, bet Irwin and Hubbell. Concrete work for one-story warehouse and a two-story stable; owner, Standard Oil Co; contractor, Gray Bros; cost \$13,000.

Shotwell south of Twenty-fifth. All work for two-story frame, four flats; owner, A. H. Denny; architect, Jepson & Holland; contractor, R. H. Pavert; cost \$6025.

Sixth Ave. west of California. All work for three eight room dwellings; owner, Felix Marcuse; contractors, Marcuse & Remmel; cost \$9000.

Sixteenth and Hoff Ave. Plumbing work, etc., for a row of five-stories and flats; owners, H. W. and Joe Hyman, trustees of Estate of Solomon and Ruth Hyman; architects, Percy & Hamilton; contractor, Leckheimer Bros; cost \$1990.

Surrey near Diamond. All work except plumbing for one-story cottage; owner, Warren J. Ireland; contractor, Geo. M. Salsbury; cost \$661.

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BUILDING NEWS.

Third south-west of Jessie. Excavations, brick, iron and stone work, patent chimneys, concrete, marble and mosaic for three-story brick building, also removing old buildings from lot; owner, O. F. Von Rhein; architect, C. A. Meussdorffer; contractor, Miller & Beck; cost \$10,378.

Tenth Ave. south of H street. All work for two-story and basement frame cottage; owner, John Leppia; architect, W. Koenig; contractor, Wm. Plant; cost \$1800.

Twenty-first east of Folsom. All work except gas and water service, mantels and gas fixtures for a two-story frame building—flats; owner, John Duane; contractor, J. Keneally; cost \$2597.

OAKLAND

Washington cor. of Thirteenth. All work for alterations and additions to brick building; owner, Henry Mathews; architect, Walter J. Mathews; contractor, J. F. Dingwell; cost \$2214.

Hamilton Tract, lot 17, block 34. All work for a frame cottage; owner, May L. De Camp; architect, D. F. Oliver; contractor, L. E. Campbell; cost \$712.

Collins Tract, lot 17. All work for 1½ story frame dwelling; owner, Chas. N. Walter; architect, W. Smith; contractor, E. P. McGowan; cost \$1848.

EAST OAKLAND

Jackson east of Lake Ave. Alterations and additions to frame dwelling; owner, F. J. Lukens; architect, Clinton Day; contractors, Anderson & Greig; cost \$6200.

Redwood Road, at Penniman Place. All work for a two-story frame residence; owner, Walter Morosco; architect, V. A. De Prosser; contractor, P. G. MacIntyre; cost \$10,850.

Enclinal Ave. SE cor. Chestnut. All work for two-story frame building, barn, shed, etc.; owners, John L. and Hannah M. Ansel; contractors, A. P. Pattiani & Co; cost \$4700.

BERKELEY

Blake Tract, lot 17, block B. Removal of 1st Baptist Church from present location to that given, and alterations in connection therewith; owner, Hartland Law; architect, Wm. Knowles; contractors, Kidder & Cooper; cost \$3250.

Pillworth Tract, lots 14 and 15. All work for a two-story frame dwelling; owner, Oliver Ellsworth; contractor, Frederick Esby; cost \$4875.

BUILDING NEWS.

ALAMEDA

Park street, southeast corner Central Ave. All work for two-story frame church building; owner, First Methodist Episcopal Church; architects, Percy & Hamilton; contractors, Thos. H., Chas. A. and Henry L. Day; cost \$11,477.

Railroad Ave. north of Grand. All work, except brick work, foundations, chimneys and excavating, for two-story frame building; owner, P. N. Anton; contractor, E. Young; cost \$1425.

Seventh street, south of Pacific Ave. All work for a six-room frame cottage; owner, Kate C. Lubben; architect, E. H. Denke; contractor, A. R. Denke, Jr; cost \$1675.

BELVEDERE

All work except plumbing and electrical work for two-story and attic frame hotel building; owner, Annie T. Moore; architect, Oscar Haupt; contractor, McLean Bros; cost \$6920.

DECOTA

R. P. Hurlbut, a well known San Francisco Contractor and builder, secured the contract to erect the Masonic Home at Decota, Alameda County. The amount is \$43,510.

SALINAS

Another story will be added to the hotel building now in progress of erection at the sugar factory. It seems the building proved, even before the frame was enclosed, to be too small for future requirements. Hence the additional story is to contain 27 rooms.

SAN JOSE

Second street cor. William. Two-story frame residence; owner, G. E. Lombard; builder, F. D. Wolfe; cost \$1550.

D. L. Steward and M. Kenney have secured the sub-contract for brick work on the Phelan Theatre Building. Z. O. Field is the principal contractor. The work will cost about \$7500.

SAN DIEGO

For many years San Diego has been renting a building for a City Hall, and paying \$2,000 per annum for same. It is now proposed to erect a new City Hall building at a cost of \$25,000, the same to be placed in the center of the plaza. In size, it will be 80x189. Experimental plans have been prepared by Architect C. A. Logan, showing how the property will look when improved.

BUILDING NEWS.

AUBURN

Bus ness at present quiet. Good rains will help us more than any thing else, though it looks as though building would be more brisk in another month. J. E. Walsh and Anderson Bros. will each build a cottage. Other work at present is mostly repairing.

CONTRA COSTA

George W. McNear is about to build a flour mill at Port Costa.

PALO ALTO

Two-story brick building. Owner, William S. Zeller; contractor, M. P. Madison; cost \$13,885.

SANTA MARIA VALLEY.

A contract has just been let for the new sugar factory at Guadalupe Lake, Santa Maria Valley. The contract is for \$484,780, the plant to be finished by September 1, and to have a capacity for handling 500 tons of beet every twenty-four hours, and to be constructed that it may be easily doubled in working power. Marshcutz & Cantrell of this city are the contractors.

MEXICO

Consul-General Cony has received plans and specifications, calling for bids for a lighthouse-keeper's dwelling at Vera Cruz, Mexico.

LOS ANGELES

The Building Trades Councils of this city have passed resolutions demanding that buildings in course of erection be provided with flooring, temporary or otherwise, for the safety of mechanics working on the building and requesting that the regulations of scaffolding be enforced.

Architect Chas. L. Strange is preparing plans for Meyer Lisner of a two-story building of eight flats, each containing six rooms, to be built on the corner of Ninth and Olive streets.

Architect John Parkinson is preparing plans for the American Building and Mortgage Co., of seven residences, two of which will be built on Ocean View Ave. in Knob Hill tract, and five on the corner of Bush and 18th streets.

Architect B. B. Bixby is preparing plans for Adair Boeck, of a two-story frame residence of eight rooms inside finish of yellow pine, plumbing, electric light and other modern conveniences, to be built at Red lands; estimated cost \$2500.

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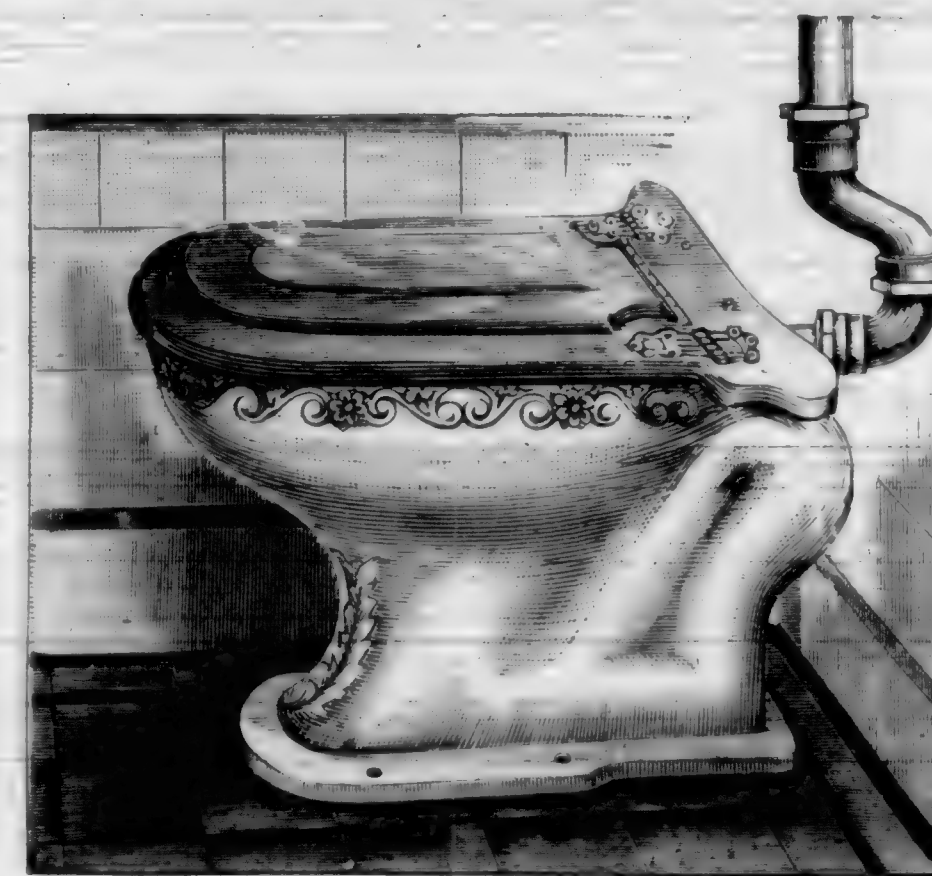
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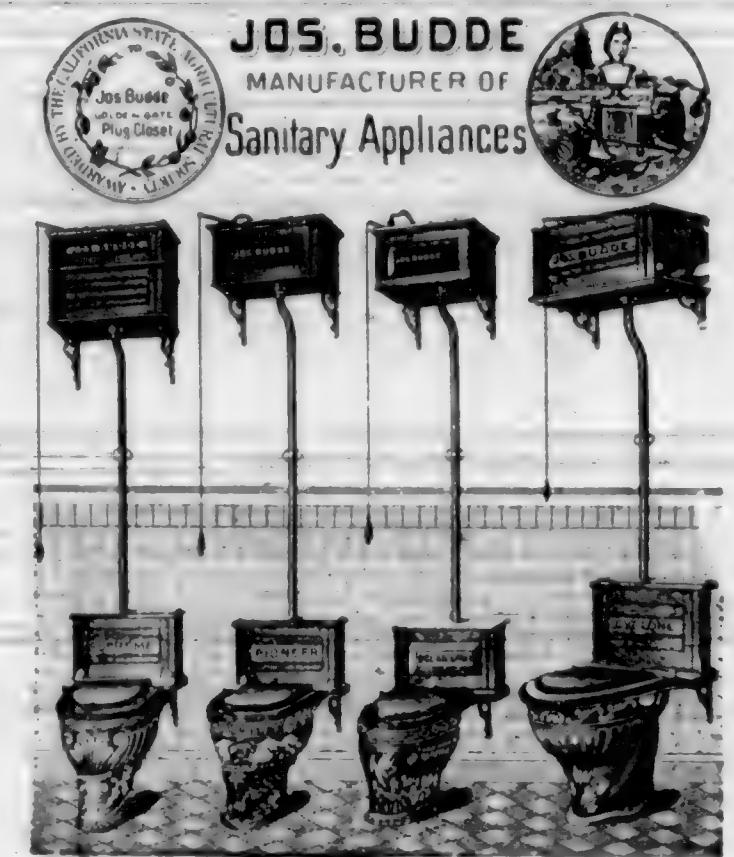
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BUILDING NEWS.

LOS ANGELES

Architect Edward Neisser has let the contract to T. C. Sears for the first of a series of cottages, to be built on the Weylacoft First street tract. The same architect has prepared plans for extensive changes to the front of the building occupied by Fox & Kellerman, on West Third street, near Broadway, that will cost \$1500.

Architect Hugh Todd has prepared plans for the Lan Franco estate, of an additional story, to the Central Block, on Spring street, near the corner of Court. The new addition will be occupied by the Order of Foresters, and will have three main assembly rooms, with the usual ante and property room; it will be constructed to conform to the present structure.

In view of the recommendations made by the grand jury, it is expected that the county jail will, at some future time, be converted into a hall of records, and a jail, with criminal courts and sheriff's quarters will be built on the county property, at the corner of Buena Vista and Temple streets.

At a meeting of the Trustees of the First Methodist Church, held Monday evening, it will resolve to receive competitive drawings for a new church building to be built on the northeast corner of Sixth and Hill streets.

The Edison Electric Company has entered into a contract with the Alcatraz Company for the construction of a complete conduit system throughout the business section of the city. This is in line with the ordinance passed by the council, requiring all electric wires and poles to come down by April 1, 1898. The letting of this contract practically decides that there

BUILDING NEWS.

shall be no "common conduit," but that each company will put in its own system. The expense to the Edison Company of establishing its plant here will exceed \$150,000. Power is to be furnished by the Southern California Power Company, or Redlands Company, as it has been called. They have also purchased the Lichtenberger homestead, on East Fourth street, between Main and Los Angeles streets, where they will erect a power station and other necessary buildings for the transaction of their business.

The new Stimson Building is to be in every respect equal to the Wilcox Block. It will be erected on the northwest corner of Spring and Third streets. Architects Reid Bros., of San Francisco, are due to arrive in this city, and in a few days matters will be settled. George W. Robinson will erect a \$6000 frame building to contain flats, on South Flower St. Architect Thornton Fitzhugh, Byrne Building, prepared the necessary plans.

Ira Smith will erect a modern residence of 12 rooms to be erected on Adams street, near Figueroa. Architects Eisen & Hunt, Stimson Building, prepared the plans.

A four-story brick hotel building, 80x150 feet in size will be erected on Broadway, between 4th and 5th streets. Henry Martz is the owner, Krause & Jenkins are the architects.

Architect John P. Krempel is preparing plans for A. Winstel, of a four-story and basement business building 40x150 feet, to be erected on the east side of Broadway, between Fourth and Fifth streets, adjoining the proposed new building of Henry Martz on the south. The front elevation will be of pressed

brick and terra cotta, plate glass throughout the front. The building is designed for hotel purposes, and will probably be used in connection with the Martz building. The inside finish has not been decided upon. A union elevator will be put in for use in the dual building. The same architect has also prepared plans of a two-story stable and carriage house for the Oxnard Co., to be built at the factory site at Oxnard, Ventura Co. Also a station building for the Pasadena Pacific Co., to be built at Altadena.

Architect A. M. Edelman has prepared plans, for H. Newmark, of a four-story business and office building, 60x150 feet, to be erected on Broadway, opposite the city hall. The front will be of pressed brick with terra cotta trimmings and marble entrance way; inside finish to be of oak; the building will also be supplied with steam heating throughout, and an electric passenger elevator will be installed. The same architect is also preparing plans, for A. Ham-burger & Sons, of a two-story brick business building 40x50 feet, as an addition to their present place of business; it will be built on the east side of New High street, near Franklin street.

ALTADENA

A contract has been let for the erection of a two-story frame dwelling for H. D. West. Consideration, \$8448. This does not include the painting, plumbing or masonry. H. H. & Moore of Los Angeles, architects; D. W. March, contractor; Horatio D. West, owner.

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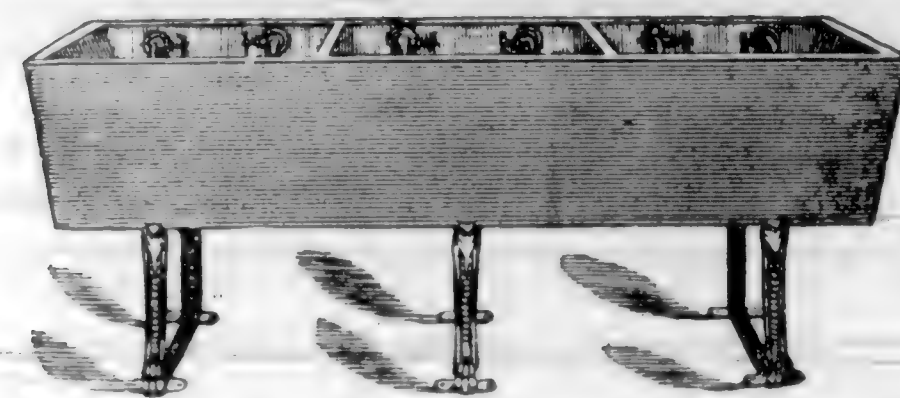
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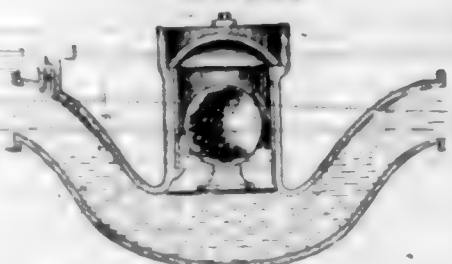
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VOLUME XIX.

FEBRUARY 20th, 1898.

NUMBER 2.

A MONTHLY JOURNAL DEVOTED TO THE ARCHITECTURAL INTERESTS OF THE PACIFIC COAST.



SINCE the publication of the last issue, the California Architectural Publishing Company of San Francisco have leased to E. H. Burrell the right to publish THE CALIFORNIA ARCHITECT AND BUILDING NEWS.

Mr. Burrell has for many years been connected with the fortunes of the paper in a business way, and as one of the Directors of the Publishing Company. He will have charge of the business department while for the literary end of its affairs Tom M. Grant will be responsible. A co-partnership having been formed to do business under the firm name of E. H. Burrell & Co., the financial responsibility falls equally upon the shoulders of the partners to the firm—Messrs. Burrell & Grant, who will continue at the old stand, 408 California street.

As to the policy of the paper in the future, it is a certainty that just a trifle more direction and just a trifle more energy, will be infused into its columns under the new regime, while it is equally as certain that outside issues and isms which have no bearing upon nor any part in a Journal devoted to Art, Architecture, Archaeology, Engineering and Decoration, will be rigidly excluded.

In this connection it will not be out of place to mention some of the objective points, that in season and out of season will receive considerable attention and unyielding support in these columns.

First on the list, because of its far reaching importance, is the passage of a State Law providing for the licensing of architects and regulating the practice of architecture as a profession. Second, the unconditional repeal of the Mechanics Lien Law. Third, compliance on the part of contractors with the rules and regulations as prescribed in the National Electrical Code for the installation of wiring and apparatus for electric light, heat and power, and enforcement thereof by every architect who is a reader of this paper.

The illustrations will be in keeping with the same spirit of liberality and excellence that has characterized them in the past but ever improving by and through the assistance and co-operation of those of our readers who possess the magic touch and willing hand with the pencil.

To place this paper—the only Journal of its kind published on the Pacific Coast—in the front rank of its class in these United States, is the real ambition of its publishers—and to that end and that end only shall all of our efforts and all of our energy be bent.

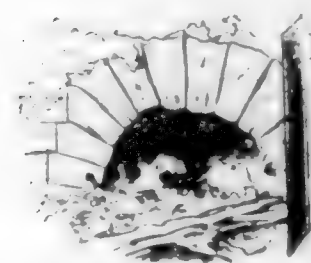
FIRE UNDERWRITERS and the California Insurance Department entertain very different views of the laws of the State, and will settle their differences in the courts. The commissioner's rulings have attracted the attention which it is evident he desired they should, for he has even gone so far as to furnish the daily newspapers with copies of his letters to underwriters before they could be delivered through the mail. This was hardly a dignified course to pursue.

Some of the commissioner's demands are indefensible. They are absurd to the verge of puerility. The sound, respectable companies will not comply with them, and a number of the largest and strongest companies can not. What can be more ridiculous than to require foreign and eastern companies to keep a San Francisco daily record of all transfers of capital stock in Hartford or London? Nothing, excepting perhaps the commissioner's demand that a company with \$50,000,000 surplus should increase its capital stock from \$100,000 to \$200,000 in order to make its contracts as good as companies with \$200,000 capital and only \$50,000 surplus.

Many foreign companies have a good deal of subscribed capital stock not paid up. The commissioner professes to hold that this unpaid proportion give these foreigners an illegal "advantage" over California companies, and he has ordered that the unsubscribed proportion be paid up forthwith. Such an order cannot, of course, be complied with.

If the courts should sustain the commissioner in his extreme position, the effects will be very damaging to business interests. Many insurance companies would be compelled to withdraw from the State, and cancellations of policies would be general. Fire insurance is so intimately related to commerce that if its sustaining contracts are withdrawn business generally must be suspended. Building operations would have to cease. The banks would not lend money. A great deal of property would remain uninsured, and fires would cause bankruptcy. Thousands of men would be thrown out of employment.

The office of insurance commissioner has too much authority, since it is possible to provoke such disaster. A dishonest or cranky official, unrestrained by mandamus proceedings, can drive out the most solvent companies or force them to pay him tribute. The object in the creation of the office was merely to give assurance of solvency and to eject and exclude insolvent companies. It was never contemplated that an insurance commissioner should use the power of the office to annoy and hamper legitimate companies, or to pose in the daily press as a Don Quixote smasher of wind-mill trusts. For the sake of the business interests of the community it is to be hoped that the courts will teach Mr. Clunie his proper place. A bull in a china shop can do a great deal of harm.



AN CONVERSATION on internal affairs of building and loan associations, an authority in this line says that it is a debatable question as to whether it would not have been better for the cause, that premiums for money loaned had never been injected into the laws under which they operate. In the past they did add materially to the gains, but now but little. They have invariably tended to mystify the borrower and lead to more or less con-

fusion and misunderstanding. The simple payment of dues and legal interest, monthly, in fixed installments, is readily understood and the borrower is satisfied. To pay interest on money retained as premium was never popular but was accepted because it was an established custom at the beginning of the successful era of building societies. Conditions have changed and the earning power of money has likewise, and the sooner the building society managers comprehend the fact the better. There was a time, and not very remote, when the circumstances probably did warrant premiums, but not now. The investor in a society receives a larger rate of interest for his money than if placed on deposit in a trust company or savings fund, and it is this that induces him to put by his earnings. Even if the rate of interest for loans was lowered, and the gains lessened, the borrower would be better off, and the investor at the same time, receive a larger rate of interest than paid him elsewhere. If lower interest would bring better loans, and place the associations on a stronger financial basis it would materially increase their popularity.

THE ELECTRICAL WIRING OF BUILDINGS.



THE FLATTERING manner in which the first paper on the above subject has been received by the progressive architects is assuredly a matter of credit alike to the forethought and enterprise of the paper's new management and to those of its readers who are able to see their weakness and seeing it are not only willing but anxious to absorb strength and enlightenment from any source that offers that of which they may be lacking.

There are contractors and contractors in this electrical wiring work, and evidence is accumulating in this office which at the proper time and in an indisputable shape, will be placed in the possession of the S. F. Chapter of the A. I. A. Many of these so-called contractors are fakers pure and simple, but the day is at hand when as a matter of self protection no self respecting Architect will permit one of these worthies to figure upon any work that is to be given out of his office.

In the development era of ten or more years ago, everything connected with electrical matters was in an experimental stage bordering on the chaotic, and these fake contractors flourished and prospered. But the unprecedented proportions that the business has assumed each year, forced the growth of experience into like proportions, with the result that the corps of alert and inventive workers were numbered by the tens of thousands. This has brought the business of the installation of wiring and of the manufacture of apparatus for electric light, heat and power down to an exact science.

Then to whom is an knowledge of this exact science more important than the Architect—surely to no one, for since our last issue the Phelan Building, on Market street has had a close call from annihilation by fire—cause—defective and careless wiring for electric lighting of the top floor of the building. Here then, Architects, have a fine object lesson, furnished to order almost. The wires were run up the elevator shaft, in the mouldings, to the attic, and then up on each side of the iron rods that supported the roof truss, and across the truss to the distributing board for the top floor.

These iron rods were bolted through an iron plate thus

forming a complete circuit between the wires. No signs of bushing could be found on the wire where it crossed the iron rod in the centre of the truss—and it is more than probable that the neglect of the electrical contractor to bush and tape that wire, at that particular spot, was the real cause of the fire in the Phelan Building.

The narrow escape of the Phelan Building has brought to the attention of this Journal as foul and criminal a piece of electric wiring as it is possible to conceive the most depraved and greedy mind of man contriving at.

The Powell street theatre, as at first wired is referred to, and it was not until the interior of the theatre was being remodeled for the Stockwell lessees that the discovery was made—that for all those preceding months, the pretty little theatre had been a virtual deathtrap—unknown to everyone, always excepting that evil minded contractor who perpetrated the fraud and made possible a holocaust in the midst of a trusting community.

This contractor, who is still in the business—used in that theatre rolls of brown paper painted black, where bushings were required—to save the cost of the hard rubber bushings specified. These rolls of brown paper—were all hidden and

points on the subject from which quotations *ad libitum* are made:

"A fair estimate of the cost of construction of a first-class modern fireproof office building, according to a well-known constructive engineer, is in the vicinity of \$3 a square foot of floor space. Thus, a ten-story building, 50 by 100 feet, being 50 by 100 by 10, or 50,000 square feet, can be constructed for \$150,000.

Prior to 1880, before the general introduction of what is now known as the Chicago construction, with elevator and steel skeleton, \$1 per square foot of floor space was a fair estimate. Office buildings then were mostly four and five stories in height, and floor space was not so much subdivided as in modern structures. The principal elements of cost were labor, bricks, cement and framing timber. The price of labor and bricks has remained about the same, that of cement and framing timber has fallen. Iron and steel are, of course, much cheaper to-day, but these materials did not enter very largely into the construction of non-fireproof structures.

"As to rentable floor space, the general reader will no doubt be much surprised to learn that it takes from 30 to 45



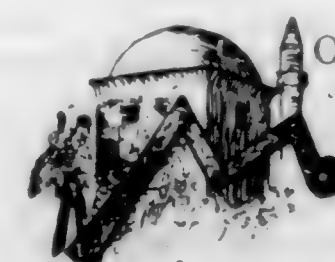
SPANISH HACIENDA.

it was also discovered that all the wiring that was hidden was of the very cheapest variety with insulation that was absolutely worthless. It was only wherever the wires were brought through and exposed that they were found to be of standard requirements.

To be Continued.

RENT SPACE IN OFFICE BUILDINGS.

FROM THIRTY-FIVE TO FORTY-FIVE PER CENT OF THE GROUND AREA NEEDED TO SECURE DAYLIGHT.



MOST PEOPLE have but a vague idea of the comparative cost of construction and the comparative amount of rentable space in new and old style office buildings. As to cost, the amount, of course, varies greatly according to the inclination and the means at the disposal of the owners. They may simply be content with putting up a good, serviceable structure, with plain every day finish, or they may be bent upon attaining the height of elegance in finish as in convenience. A writer in the *Chicago Times-Herald* in a clever paper gives some good

per cent of the ground area of the building lot to procure daylight for all parts of the structure. On this point the authority cited says:

"As to rentable floor space, the following percentages of the gross area should be available for office uses: In a corner building, 25 by 100, 70 per cent; in an interior building, 25 by 100, 55 per cent; in a corner building, 50 by 100, 72 per cent; in an interior building, 50 by 100, 64½ per cent; in a corner building, 100 by 100, 62½ per cent; in an interior, 100 by 100, 55 per cent. These percentages, however, are attainable only in buildings planned according to approval principles of engineering and architecture, and have not by any means been reached in all modern structures. I should say that 60 per cent of the gross floor area is a fair estimate for the rentable space in modern buildings, as against 70 per cent in the old. The difference is due partly to the presence of elevator shafts and an increased number of partition walls, but especially, perhaps, to a more perfect compliance with the demands of sanitary science.

"For example, much space is devoted to light courts, proper light not being obtainable in offices beyond say twenty-five feet from the windows. In this, as in other respects, the sanitary condition of the office renter is vastly better to-day than it was seventeen years ago. The consequence has been a tremendous increase in operating expenses, for the landlord is obliged to furnish a thousand and one

conveniences and services not thought of before. Of the average cost of operating modern office buildings, it is impossible to give anything like a fairly accurate estimate. Faulty designing is a frequent source of unnecessary expenditure. I know of buildings of the same size and equivalent hours of service in which the weekly expenses of the one equal the monthly expenses of the other."



NATURAL BUILDING STONES OF THE PACIFIC SLOPE.

GRANITE



THE FACT that the principal cities of the Pacific Coast, and especially San Francisco, have reached the stage of permanent improvements in sympathy with the general commercial developments of the whole country, has naturally awakened a general interest in the discussion of the relative merits of our natural resources in building materials. It has long been known in a general way that California is at least as rich in such resources as any region in the world; but it is not generally known that if half the capital and energy that is now devoted to the search for precious metals were devoted to the development of our quarries, the profit to individuals and the gain to the whole community would be larger.

In discussing the relative merits of different natural building materials, granite comes first. Because, though geologically not the oldest of all rock, it is in all essentials the best for certain purposes. It is free from the cellular cavities of all trappean and volcanic rock, with a larger proportion of quartz than the later igneous rock. Composed of feldspar, quartz and mica in confused crystallization, it is the strongest of all building material in resistance to crushing and all other tests. With these qualities it is not remarkable that the demand is greater than for any other stone; the output in the United States reaching an average value of twenty million dollars annually—while the average for the past five years is much greater.

In any permanent building some granite is used, whatever other materials may be superposed; because its wearing qualities as well as its strength, exceed all other materials. The only buildings that have survived for four thousand years or more are granite buildings; and except where fire, violence, or the abrasion of drifting sand, has made some impression, the carved detail is still as sharp as when it was first executed. Granite is however as various as other materials according to its local peculiarities. The proportion of the different properties, the relative and actual size of the crystals, the cementing material in the interstices, and the color of the quartz, all must be considered in comparing the merits of different granites. In a general way it may be

said that as a matter of strength and durability, the smaller the particles, or crystals, and the whiter the quartz, the better—and again: the less lime there is in the cementing. In short granite is an ideal concrete, that nature has kept under a tremendous pressure for innumerable centuries—and she has made it in so many varieties that we are not restricted to mere sombre tones in realizing our designs and desires; but can avail ourselves of beautiful contrasts and harmonies of color. We have the large variety of greys, light and dark, brownish, yellowish or greenish; and nearly white, and the whole grade of reds, to rose pink; the decided greens, and the blues. And all these can be darkened and intensified by polishing—all of the peculiarities of granite being that a polished surface retains its polish under almost all conditions. The exception is where the red or pink granites are exposed to the corrosive action of the atmosphere of manufacturing towns. In such cases the protoxide of iron in the quartz is affected and disintegration sets in. In general the colored varieties of granite have larger crystals than the colorless varieties; but as they are generally selected for decorative reasons, the difference in the comparative strength is not important. California has only begun to develop her granite quarries, but there are already several whose facilities and management are equal to any demands that can be made. That is to say, that these facilities exist in working order to execute several contracts on time, each as large as would be involved in our promised Post-Office.

There is no limit to the size of the blocks that are obtainable in granite, but the practical limits in handling. Our mechanical resources are probably greater than the world has ever known; and if the time shall ever come when for



some object we are willing to meet the necessary expense, we can quarry and transport larger blocks of granite than were ever attempted in Egypt. It is not claimed that California furnishes every variety of granite known, but she furnishes a greater variety than any other region. Each locality has some distinctive peculiarity owing to local influences—the large crystal, blue, and rose colored granites of Aberdeen have not yet been discovered but there is no reason why they should not be, and mean while the people

are not yet wise enough to use what they have for all it is worth.

This short sketch of a very large question is intended merely to arouse interest and discussion, and it is to be hoped that the readers of this Journal will not hesitate to write any queries that are suggested—when answers will be published with the next issue. It is promised to give each month a short treatise like the present on some variety of building stone, and together with a general description, to give some simple rules and suggestions for experimental tests that can be applied without special apparatus or education.



[The Editor is not responsible for anything which appears in this column.]

THE following letters regarding the Concrete floor test at Wells, Fargo & Co.'s new building are self explanatory:

THE PACIFIC COAST BORAX COMPANY,
NEW YORK HOUSE, 185 WATER ST.

NEW YORK, Feb. 17, 1898.

To the Editor of the California Architect and Building News.

SIR:—In reference to your article on Fire-Proof Concrete tests in your January issue we desire, through your courtesy, to place before your readers the following facts:

First—We were not invited to participate in the test in anyway. We were entirely unrepresented.

Second—The slab supposed to represent our system, as described by you, was not built as we would have constructed it. The construction was faulty.

We would inquire through you: 1st—If the other system was not represented by an accredited agent. 2d—Who built the slab that was supposed to represent our system.

Yours respectfully,

SMITH & RANSOME Co.

Per Ernest L. Ransome, Pres.

WESTERN EXPANDED METAL AND FIRE PROOFING Co.,
CLAUS SPRECKELS BUILDING, ROOMS 114-15-16.

SAN FRANCISCO, CAL., Feb. 24, 1898.

California Architect and Building News.

GENTLEMEN:—Your favor of even date, together with Mr. Ransom's letter, are at hand, and in reply, we will say that we furnished the No. 16 gauge 2 and 1/2 inch mesh expanded metal for the test referred to, at the request of Mr. G. W. Percy of Percy & Hamilton, Architects.

This Company paid no further attention to the construction of the slab, as the matter was left entirely in the hands of Mr. Percy and his workmen, and we do not even know what mixture was used and did not know when the test was to be made until notified by Mr. Percy the evening before, to be present the next morning at ten o'clock, at which time

General S. W. Backus, secretary, and myself, together with many others, witnessed the test referred to in your Journal.

Very truly yours,

Western Expanded Metal & Fire Proofing Co.

Dict. N. L. B. N. L. BELL, Manager.
CUSHING, WETMORE COMPANY, 508 California St.

SAN FRANCISCO, Feb. 25, 1898.

California Architect and Building News.

GENTLEMEN:—In reply to your favor of the 25th inst., requesting information in regard to concrete slabs built at Wells, Fargo & Co.'s new building, we would say that the slabs were built by us under instructions received from Messrs. Percy & Hamilton, Architects, and under the personal supervision of Mr. James Humphreys, superintendent of construction. The iron and metal lath were furnished us at the building and no agent of neither method was present during the construction of the slab, either did we follow any instructions other than those given us by Mr. Geo. W. Percy and Mr. Humphreys. Very respectfully yours,

Cushing Wetmore Co.

Per George P. Wetmore.

THE Report of the Metal Lathing test, as printed in our last issue, seems to have been anything but satisfactory to the writer of the following letter:

To the Editor of the California Architect and Building News.

DEAR SIR:—In your last issue there appeared a statement which read as follows:

"On Wednesday, January 26, an interesting test was made at Wells, Fargo & Co.'s building designed to show the relative merit of different kinds of metal lath and other materials * *. It was intended to test four different kinds of metal lath in the chimney, but the representative of one kind became dissatisfied and wished to prevent the test being made."

Now then let me here inform your readers the reason why the owner and inventor, Martin Carrick of that "one kind, that became dissatisfied," but whose lath proved itself to all who witnessed the test, to be superior to the others, notwithstanding the disadvantages to which it was subjected, the principal one being the manner in which the coat of mortar was put on, which I boldly assert was not equal in body or workmanship to that which was given to the other makes contesting.

Still, when all the others were scorching and smoking, and long after the wire lath that had already been awarded the contract for the building, was in a blaze, it stood its ground nobly and will stand for all time.

I will now give my reasons for objecting to a test being made on my lath, and I will ask any fair minded man to place himself in my position and see if he would not do as I did under the same circumstances.

Last October I figured on the fire-proofing construction of the new Wells, Fargo & Co.'s Building, now in course of erection on the corner of Second and Mission streets. Each contractor who was invited to figure on the work, was instructed to submit his own sketches and complete specifications, in order to show the architect how he would perform the fire-proofing construction on said building.

Bids to be submitted on the 13th day of above month at noon sharp. I handed in my bid, sketches and specifica-

tions at the hour and place mentioned and waited developments. Let me say right here, that after several weeks deliberation over the plans and specifications of the selected contractors, the architects made up their minds to make several changes in the fire-proofing work for the building—so they swept aside all bids, plans and specifications that had been submitted and called for new ones, but I was not favored with a second invitation to bid.

Two weeks passed by without hearing any more about the matter, being anxious I decided to call down to the new building, to get some information regarding the work I had figured on; I was met by Mr. Wetmore the contractor for the concrete work, who said to me "Mr. Carrick I am requested by Mr. Percy to ask you if you will be willing to go into a contest with your lath; and furthermore if you will pay your part of the expenses of preparing a furnace to test the different kinds of metal lath?"

My answer was, "all things being equal I was willing." I called on Mr. Percy in a day or two after that and he said he was going to make a plan of the furnace, and that he would let me know in time, he also said he had "no ax to grind" with anyone; I thanked him and went away. I heard nothing more about the matter until about the first or second of December when I met Mr. Percy on the way to his office, he asked me to walk back with him and he would let me have the plan of the furnace. I got the plan and made panel according to the directions.

We then came to a stand still again until about the 16th of December, when I received a postal informing me that the panel and lath I had prepared for the test was required at once. I delivered them as ordered and all went well until the 4th day of January, when to my great surprise, there appeared in a morning paper of that date, the news of the awarding of the contract to Mr. Keating for the fire-proof construction on the Well, Fargo Co.'s new building for which I thought I was competing and that, more than that, the test which had not yet been made was to be a part of the competition.

In the name of common sense, what interest or gain, was I to receive from that building after the contract had been awarded to another. The day after the news was published I called at the office of Messrs. Percy & Hamilton, for my plans and was told that they had disappeared and that they could not be found, so taking all into account, I think my reasons were well founded and sufficient for taking the stand I did.

In conclusion let me here state, that I wish all who witnessed the test and those who may have read the account in the CALIFORNIA ARCHITECT, to distinctly understand that I never for one moment entertained any fear as to how my lath was going to stand in the test, I was well aware that it would come out on top, and was ready to put up \$100.00 or \$500.00 that my lath would outlast the others in any fire-test, all things being equal. It is the invention of a practical plasterer, and is manufactured here in San Francisco.

Respectfully, MARTIN CARRICK.

NOTICE TO ARCHITECTS.

THE BOARD of Managers of the Mendocino State Hospital invite competitive plans and specifications in detail for the erection of an administration building to be erected on the premises of the said Mendocino State Hospital, near Ukiah, in the county of Mendocino, State of California to

cost \$58,800, including the sum of twenty-eight hundred dollars premium for the plans and specifications adopted and supervision of the erection of said building to completion.

The plans and specifications must be delivered on or before 2 o'clock P. M. of the 19th day of March, 1898, to W. W. Cunningham, secretary, at Ukiah, California.

The Board reserves the right to reject all or any of said plans and specifications.

Further information may be had by applying to W. W. Cunningham, secretary, at Ukiah, Cal.

JANUARY BUILDING.

WE ARE indebted to the *Builder and Contractor* for the following summary of building operations at Los Angeles. During the month of January the Superintendent of Buildings issued 161 permits, amounting to \$219,325, viz:

108 new buildings, stables, etc.....	\$198,060
39 alterations and repairs.....	19,335
14 removals.....	1,910
161.....	\$219,325

Which are classed as follows:

Frame cottages.....	45
Two-story frame residences.....	37
Brick and " ".....	1
One-story brick buildings.....	8
Three-story " ".....	1
Warehouses.....	1
Factories.....	1
One-story frame stores.....	4
Stables and sheds, etc.....	10
Additions and repairs.....	39
Removals.....	14
Total permits.....	161

The Plumbing Inspector issued, during the month of January 268 plumbing and sewer permits.

The County Recorder's office shows 49 contracts filed during the month of January, amounting to \$190,891, which are districted as follows:

Los Angeles.....	42, amounting to.....	\$167,560
Pasadena.....	1, ".....	4,200
Altadena.....	1, ".....	6,449
Garvanza.....	1, ".....	3,638
Glendora.....	1, ".....	1,345
Azusa.....	3, ".....	7,704
		\$190,891

COMPARATIVE BUILDING.

THE FOLLOWING totals, showing the number and amount of the building permits issued during the months of January for the past three years and the present, will be interesting to those who think that the building boom has come to an end:

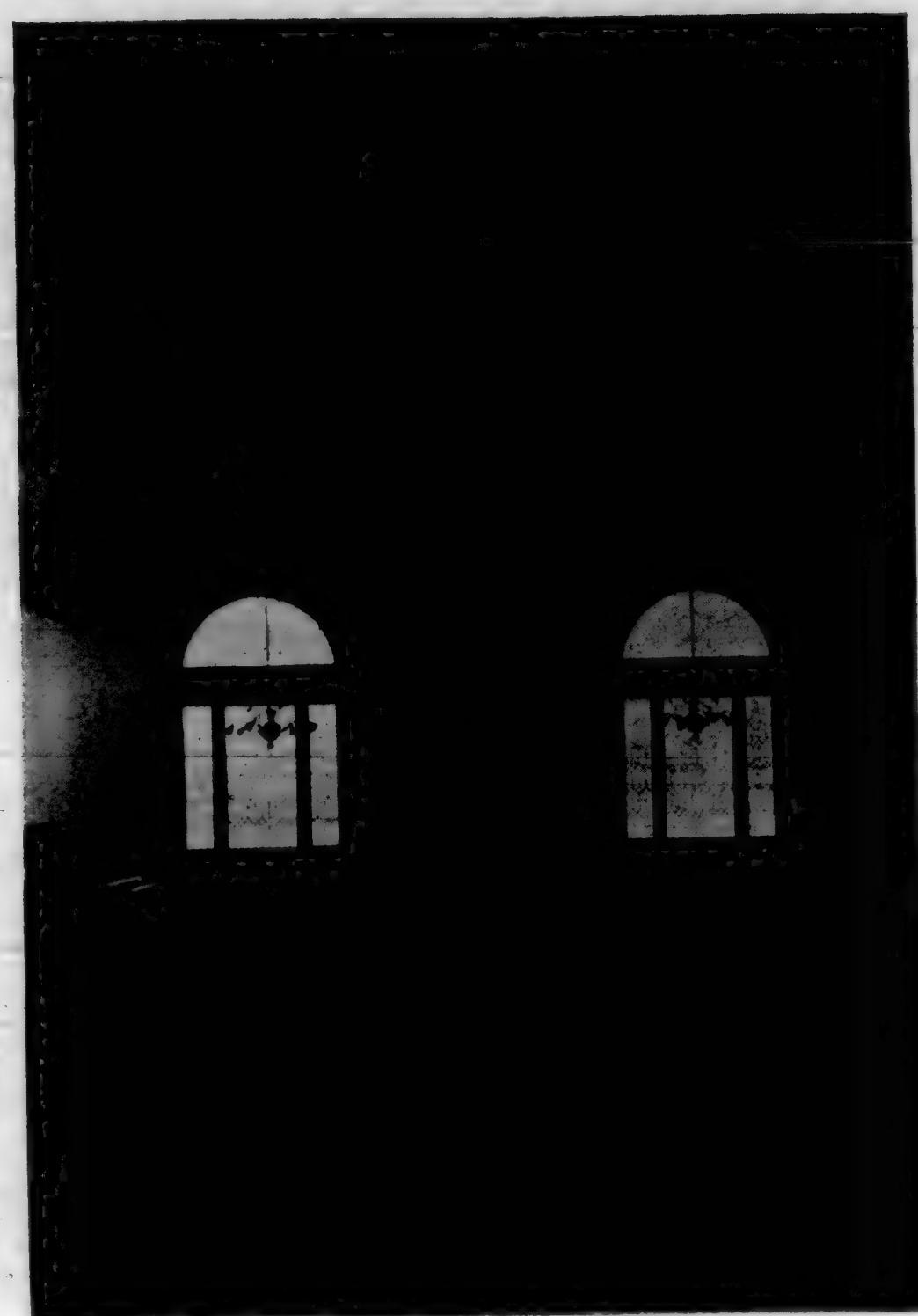
January, 1895—Permits issued, 165; amount.....	\$180,000
" 1896— " " 160; ".....	244,191
" 1897— " " 138; ".....	126,020
" 1898— " " 161; ".....	219,325

By reference to the following table, it will be seen that Los Angeles presents a very favorable showing in a list of some of the principal cities of the union.

CITIES	1896	1897
Chicago.....	\$22,730,615.....	\$22,777,230
St. Louis.....	10,190,898.....	9,471,640
Pittsburg.....	5,591,300.....	6,899,118
San Francisco.....	5,673,998.....	4,460,117
Detroit.....	5,465,228.....	4,385,840
Los Angeles.....	3,805,175.....	3,660,175
Indianapolis.....	2,387,864.....	3,445,047
Cincinnati.....	3,110,415.....	2,486,890
New Orleans.....	3,257,643.....	1,619,285
Omaha.....	2,402,591.....	1,448,776
Kansas City.....	1,900,458.....	1,848,390
Denver.....	1,305,872.....	1,265,300



THE MAIN ENTRANCE



THE EAST END



THE BANQUET HALL

INTERIOR VIEWS—TEMPLE MISSION LODGE NO. 169 F. AND A. M.
HERMAN & SWAIN, ARCHITECTS.



From "The Roman
Triumphal Arches."

THE ARCH OF TITUS, ROME.

Reprinted from The Brochure
Series, Boston, June, 1897.

CALIFORNIA ARCHITECT AND BUILDING NEWS
SAN FRANCISCO.

VOL. XIX. No. 2. FEBRUARY, 1898.



From "The Interiors of
Fontainebleau and Versailles."

GALLERY OF HENRY II, FONTAINEBLEAU.

Reprinted from The Brochure
Series, Boston, January, 1897.

CALIFORNIA ARCHITECT AND BUILDING NEWS
SAN FRANCISCO.

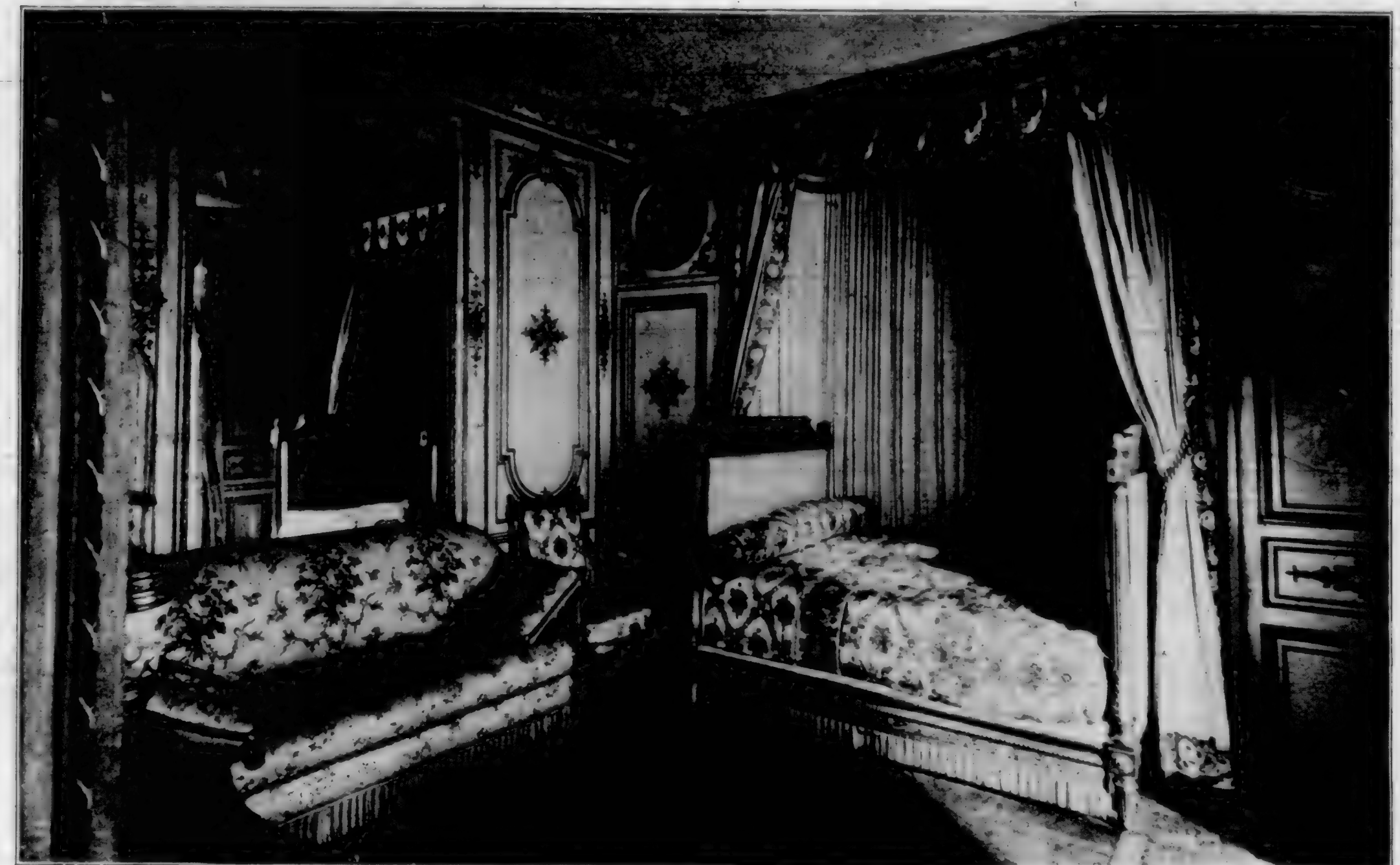
VOL XIX No. 2. FEBRUARY, 1898



From "Library
Architecture."

THE VATICAN LIBRARY, ROME.

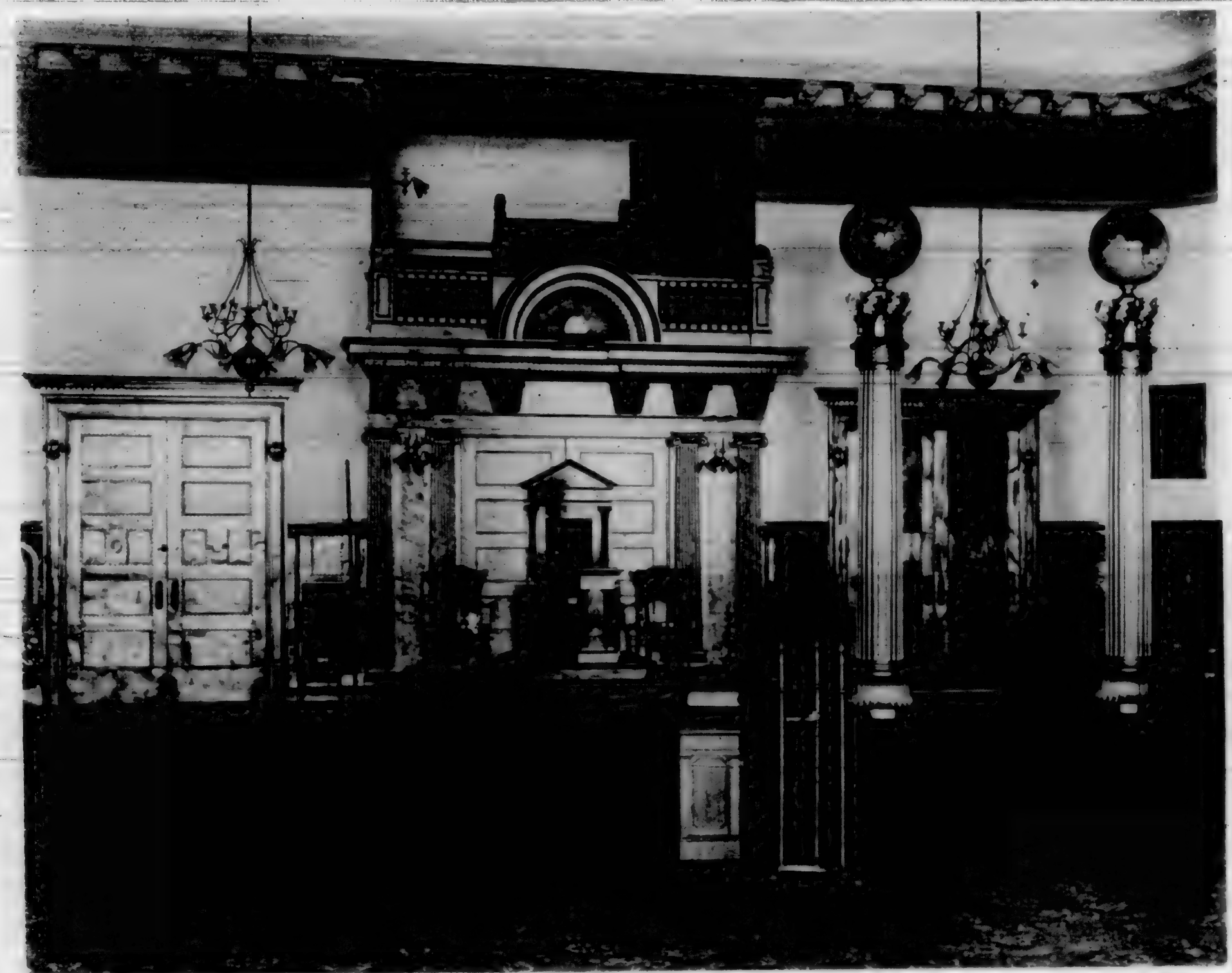
Reprinted from The Brochure
Series, Boston, November, 1897.



From "The Interiors of
Fontainebleau and Versailles."

BED OF MME. DE MAINTENON, FONTAINEBLEAU.

Reprinted from The Brochure
Series, Boston, January, 1897.



INTERIOR VIEW—WEST END—TEMPLE MISSION LODGE NO. 169 F. AND A. M.
HERMAN & SWAIN, ARCHITECTS.

CALIFORNIA ARCHITECT AND BUILDING NEWS.
SAN FRANCISCO.

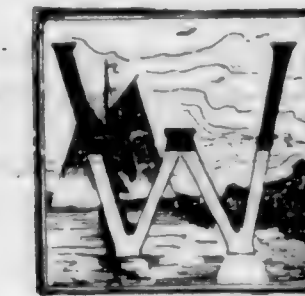
VOL. XIX No. 2. FEBRUARY, 1898



The management of this journal desires to extend a cordial invitation to all architects on this coast and elsewhere to contribute designs for publication.

Drawings should be made with perfectly black lines on a smooth white surface. Good tracings, if made with black ink, answer the purpose.

The designs selected will be published without charge. All drawings, whether accepted or not, will be returned to their authors, who must bear express charges both ways.



gravings:

WITH this issue we present four illustrations taken from the Brochure Series of Architectural Illustrations, published by Bates & Guild Company, 13 Exchange street, Boston. From the Brochure we reprint the following descriptions of these en-

THE Arch of Titus, Rome.—If not the first, certainly one of the earliest examples of the elaborate architectural style in which the triumphal arches were carried out, is the arch of Titus in Rome. Built by the Roman senate and people to commemorate the destruction of Jerusalem in 70 A. D., it was not finished until after the death of Titus in 83, though it was doubtless begun during his life. During the Middle Ages it was made a part of the fortress tower of the Frangipani, and was not isolated until 1822.

In composition it consists of a single opening framed by the composite order, and is said to be the first ever erected in which that order was employed. Whether or not that be true, it is certainly a graceful example of it, and has been treated as a model of its kind. It is built of large blocks of Parian marble, and is simple in outline and in excellent architectural taste. The archway is flanked on both faces by two engaged composite columns on each side which support the entablature. The frieze is sculptured with sacrificial processions. The shafts gradually diminish from the pedestals, and are surmounted by the usual acanthus capitals. They are doubtless originally all alike, though the outer columns have been restored in a manner unworthy of their old companions. The volutes, and in short all parts of the capitals as well as the details of the entablature, are in a style of profuse ornament. The spandrels are filled by two Victories; one holding in her hand a standard, and the other, apparently a laurel crown. The brackets under the cornice are formed of dolphins resting upon shells. On the keystone, now much decayed but once deemed the finest in Rome, are relics of a helmeted female figure, probably Rome herself.

The famous reliefs of the "Spoils of the Temple" are to be found on the walls of the interior of the passage. The sculptures are now much worn, but may still be recognized by their beauty and vigor as belonging to the first era of Roman art. The attic which surmounts the whole and bears the inscriptions is overpoweringly high, and perhaps detracts from the beauty of the general proportions. The

absence of sculpture on each side of the arch is also a defect; for the only logical function of these monuments is to present surface for sculptured decoration. Yet, as a whole, the arch of Titus is certainly the most remarkable in Rome for harmony of proportion and beauty of sculpture.

LIBRARY of the Vatican, Rome.—The Vatican Library was founded by Pope Hilaire I., in the fifth century, and has been enlarged by each of his successors. It occupies one of the wings of the Vatican Palace adjoining the museum and the portion of the building designed by Bramante. The books are arranged in closed cases standing against the piers and walls. The decorations are of the richest type of the Italian Renaissance.

GALLERY of Henry II, Fontainebleau.—The ball-room or gallery of Henry II. is by many considered the masterpiece among the interiors of the French Renaissance. It is 97 feet 4 inches long and 31 feet broad. It has a beautiful outlook on one side upon the gardens, and on the other upon one of the courts, through large arched windows five on each side, having no architraves, occupying the whole space of the alcoves which are 8 feet in depth, separated by piers 7 feet in width. These alcoves are surrounded with seats 13 inches in width and 20 inches high. The wainscot, 8 feet 6 inches high, is of quartered oak with no finish whatever, probably planed and scraped, but not so smooth as would be made by sandpapering. The mouldings and flutes of pilasters are gilded with dull gold. The abundance of light gives an added value to the magnificent decorations of the walls and ceiling. The caissoned wooden ceiling in octagonal panels with rich carved mouldings is of quartered oak of the same color as the wainscot, enriched with gold and silver, the field of the octagonal panels in gold. The polished oak floor laid in an octagonal pattern, seems to reflect the sumptuous design of the ceiling, and from its finish and lack of gold, is a little darker in tone. The walls as far as the frieze, are covered with paintings, low in tone, and of a general effect, containing the emblems of Henry II. and Diana of Poitiers, surrounded with frames of gilded mouldings. Serlio, the architect of this room, designed to cover it with a vaulted ceiling, and the corbels for the springing of the vault may be seen on the piers, now serving to support branching chandeliers. The frieze is a mass of mythologic and ideal figure compositions. The vaults and walls of the bays or alcoves are similarly painted, although with broader and simpler designs. At one end of the room is the musicians' gallery, and at the other the superb mantel shown in our illustration.

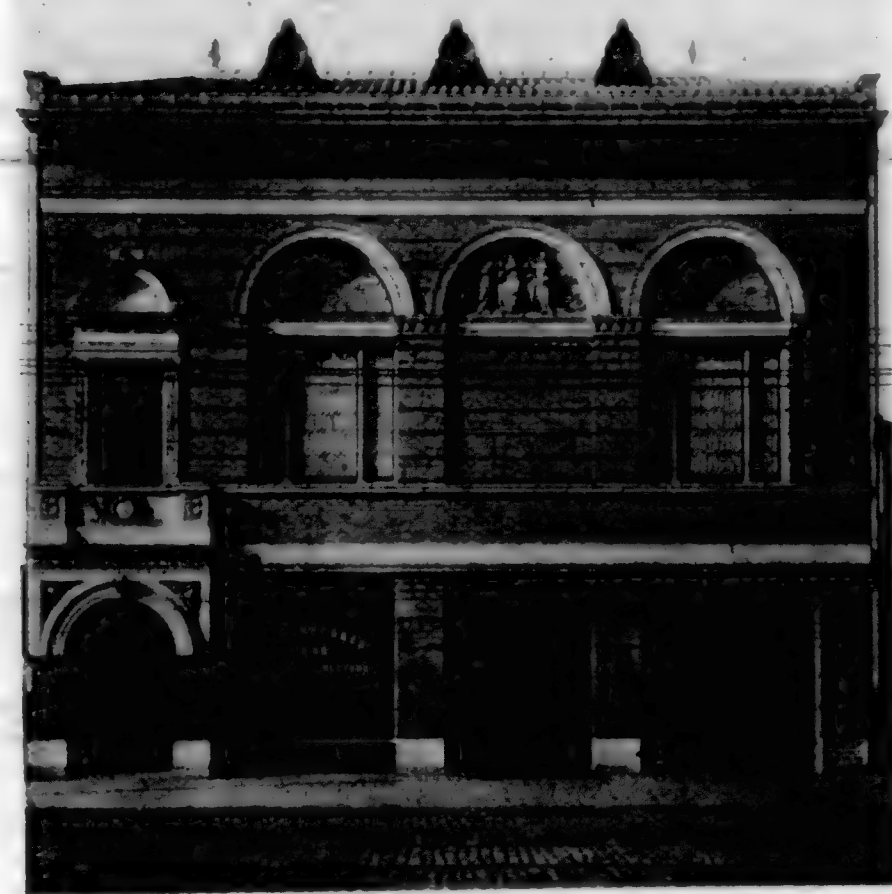
The freshness and wonderful preservation of this room are at first sight astonishing. Decorated by Primaticcio and Niccolo dell'Abbate, between 1552 and 1557, how does it come to be in its present perfect condition? It has been retouched and repaired at various times since then, and has suffered from the would-be improvements of decorators, but was all thoroughly restored in 1834 by Alaux, whose skill and painstaking research have given us a very close approach to the original room.

BED of Mme. De Maintenon, Fontainebleau.—This little room, 12 by 14 feet, is light and cheerful in effect, and simple in design. The walls are finished in grayish white with mouldings and ornaments in dull gold. The furniture

is all of gold with fillets and ornament burnished, and is covered with grayish white silk, lighter and warmer in tone than the walls, with patterns of colored flowers. The foot of the bed is covered with white silk, and the hangings are all of white silk, with a border of yellow, light green and rose.

IN THIS number is illustrated the new Temple of Mission Lodge No. 169 F. and A. M. situated on the west side of Mission street, between 22d and 23rd streets, Hermann & Swain, Architects.

The building occupies a lot 54x125 and is two stories in height in the front portion and three stories in the rear. The building is of fire-proof construction and is provided throughout with all modern conveniences in the matter of heating, lighting, ventilation, plumbing, etc.



The exterior facade is in the Italian Renaissance architecture, executed in buff, Roman brick and cream terra cotta with red tile roof, the whole presenting a pleasing combination.

In the basement is located the heating and ventilating plant, motor and electrical apparatus, the Morgan system being used.

The first story contains two large stores. The main entrance to the building is finished with Tennessee marble dado and mosaic floor and the ceiling of same, paneled in oak.

The second story contains one lodge room, 26x40 in size with two capacious ante rooms.

Also the Masonic Hall 43x63 ft. in size and 22 ft. in height with 7 ante rooms and organ loft in connection with same.

The corridors and stairways in the two upper stories are finished in hard wood with ornamental copper dados, five feet high, all doors and finish being also of ornamental copper. All the antique copper and metal work of the Temple is in keeping with all the metal work done by the well-known house of Jas. Gilfoy & Sons of 208 Eighth street.

The interior of this Masonic Hall is finished in ornamental copper in the most elaborate manner, no expense having been spared in making it the finest hall on the Pacific Coast.

The general finish of this room is in the Roman Corinthian order with massive fluted pilasters on the North and South walls supporting the heavy beam finish of the ceiling above.

The central portion of the ceiling is in the form of a circular dome with 235 incandescent lights, 115 of which are worked into a colored star.

The gas and electric fixtures were selected by the committee in charge, after a most thorough canvas in the market. Designs were submitted by the several firms competing. Mr. Chas. F. Kinsman whose office is in the Claus Spreckels Building succeeded in pleasing all concerned. The same are of novel and neat design, of eastern manufacture, and show in each fixture quite a departure from what are seen in most buildings of this kind.

The Master's station in the East is in the Roman Corinthian order of architecture, with the rising sun in cut glass set in the pediment which is emblematic of the Master's office.

The Senior Warden's station in the West is in the Grecian Ionic order with the setting sun in cut glass set in the pediment, the same being emblematic of the S. W. office.

The Junior Warden's station in the South is in the Grecian Doric order with the meridian sun in cut glass set in the pediment, the same being emblematic of the J. W. office.

The station in the North is the Tuscan order. The cut glass suns in the various stations are lighted with incandescent lamps.

The two golden pillars in the West end of the room were modelled after the pillars in the North Portico of the Great Hall of Xerxes at Persepolis, being the nearest known examples of the two bronze Jachim and Boaz, which were the principal ornaments in the facade of the Temple of Solomon.

These two pillars of Solomon's Temple being of metal were probably much finer in detail and more elaborate in ornamentation than their prototypes of Persepolis, but as we have no other actual examples to compare with, the restoration may be somewhat fanciful.

The carving on the pillars was executed by Frank T. Riley of 528 Fifth street, who was also awarded the contract for the spheres, Celestial and Terrestrial, that are mounted on the two pillars as shown in illustration of West End and Senior Warden's Station.

The treatment of the walls, ornamental stucco work and ceiling of this hall is in blue and gold.

The third story contains the spacious banquet room, seating 200, and also smoking room, janitors' quarters, store rooms, etc.

The furniture, fittings and hardware were all made to order from special designs.

The plumbing work throughout is of the very best, all modern conveniences being provided for in the specifications; the work was done by the "old reliable" firm of Wm. S. Snook & Sons of 554 Clay street, where the "Lilly" closets, from the works of the John Douglass Company are to be found very much in evidence when wanted.

The excavations were made by the John Kelso Company. The California Art Glass Works are responsible for the cut glass Sun bursts and Wm P. Fuller & Co. supplied all the window glass used in the building.

The cost of building, exclusive of site, was \$30,000.00.

THE FOLLY OF PRICE CUTTING.

IF ANYBODY is in doubt of where profits sometimes go in producing stone for building, let him consider the price at which Georgia marble has been sold for the new Minnesota Capitol—75 cents a cubic foot, delivered at St. Paul! It is said this price will not net the quarrying company over 21 cents, after delivery charges are paid. Out of this meager price must come cost of quarrying, loading, interest charges and other fixed and incidental expenses always attached to a large production, and the profit. It is safe to say it won't take a very large bag to hold the latter. An excuse for the low price is given that "the marble company wanted the advertisement which this structure will give it." As for the result, if the motive is correctly stated, there can be no doubt. The new capitol will be a magnificent exhibit of the splendid qualities of Georgia white marble, and a perpetual advertisement of the company that furnished it. But, and here is where the evil of such a bid comes in—the selling price of the marble has been marked down below the point where there is any reasonable profit. If this great producer sets the example of unprofitable selling prices, competing producers must meet its terms—and a warring over prices will ensue at every contract letting—and we will have the pitiable example of Bedford limestone interests repeated in the strife thus engendered among the Georgia marble producers.

There may be profit in it for the Georgia Marble Company at 21 cents per cubic foot at the quarry, notwithstanding the added value of the advertisement, and the transaction may be, and doubtless is, a perfectly satisfactory one; there may be profit to the Bedford quarryman who sells his No. 1 stone at the quarry for 12 cents a cubic foot; but while contractors and builders are not falling over each other in a scramble to get orders on file for their product, it doesn't seem to us that it is the best for the future of Georgia marble or Bedford stone to cut so deep while the system is in an enfeebled condition. To do so brings onto a level these superior products with the inferior from every quarter. That's something very hard to overcome, particularly if there are any politics in the jobs. We believe defeat has often been met at lettings of important works just because the cheap price at which good stone has been offered was considered by the board good evidence of a degraded character. Like wages, when the price of stone is put down, it is almost impossible to put it back. Better keep it at a profitable price, and create a demand for it by judicious advertising, than to sell it at a loss, and trust in the advertisement to establish the profitable price. It is well to bear in mind that there are other holes in the ground than the one you are digging in.—Stone.

WE ARE indebted to *The Investigator*—one of Chicago's brightest papers—published in the Insurance interests—for the Jenny paper together with cuts for illustrating the same.

FIVE hundred thousand dollars has been set aside by the committee on Appropriations, for the S. F. Post-Office Building and the Supervising Architect has decided against experimental contractors for structural material. Granite and granite only will be used all reports to the contrary notwithstanding.

THE USE OF SCULPTURE IN ARCHITECTURE.

WITHIN the past four or five years our buildings have gradually become more ambitious and ornate in style, due, perhaps, to an attempt to evolve something which shall hereafter pose as a standard of excellence. Carvings more or less elaborate are being introduced to a greater degree and, of course, when they are properly arranged in position their effect is harmonious and inspiring. But nowhere save in the East has there been, as yet, an attempt at harmony or judicious arrangement.

The Western architects, almost to a man, have heretofore relied almost solely upon the fact that a certain amount of plastic decoration is required, and in consequence without taking into consideration any method or scheme of arrangement, they have simply dotted over their exteriors with incongruous and fantastical ephemerae which lack both necessity and meaning.

Art is ideal; and ideality is emblematic of something which has realism for the body and spirituality for the soul of that body. Of course this is less typified by an architectural composition than a creation delineated by means of any allied art, purely because there is more of reality in something devoted to the comforts of man than in that which is intended to conduce to its spirituality. Now, to begin with, as has come within the limits of my experience, there is, say a carved belt course about a contemplated building. The composition of the design to be employed is left to some draughtsman to work upon during an hour when he is not more usefully (?) employed. And this draughtsman is not necessarily the best man in the office. Usually he happens to be a student whose talent, however great, has not as yet been directed into the proper channels. Without regard to the character or the style of the building he proceeds with the first idea which happens to spring into his mind. The details are now complete. The next step is to invite some contractor of "cut stone" work to present an estimate. Of course, competition steps in and, as a rule, the work is "let" to the lowest bidder. He has taken the contract at the lowest figure at which it can be done, so he hies himself away to the presence of some monumental sculptor (?) or, still worse, to an ordinary "every day" stone-cutter. Again, there is competition and, not infrequently, the stone-cutter is empowered to execute the carving to the best of his skill. His work is completed and the character of the design—if, by chance, the draughtsman has been lucky enough to give it character—is entirely lost through the lack of the proper artistic training of the artist (?). Thus one of the elements of harmony requisite to the unity of the perfect architectural composition has been debased and consequently the unity of the entire structure destroyed.

Of course we are aware that this force of circumstances is not altogether the work of the architect. Generally the favorite theme of the client, economy, enters largely into the subject. But, if we except even the latter step, the architect still remains guilty of the first impeachment, namely, that of placing the composition of the ornamental details in the care of an inferior workman. As he would not allow inexperience to prepare the drawings for trusses and other constructive work, so should he not allow the novice to experiment with the decorative.—C. G. Robinson, in *Western Architect and Builder*.

INTERNATIONAL COMPETITION.

THE TRUSTEES, appointed by Mrs. Phebe A. Hearst, hereby invite the co-operation of the Architects of the world in the preparation of a permanent, general plan of the buildings and grounds which are to compose the University of California, in Berkeley, (near San Francisco), California.

Dated at San Francisco, California, December 3, 1897.

J. B. REINSTEIN,
JAMES H. BUDD,
WM. CAREY JONES,

Trustees of the Phebe Hearst Architectural Plan of the University of California.

I hereby guarantee the performance of all the conditions and covenants set forth in this Programme, to be performed by the Trustees of the Phebe Hearst Architectural Plan.

San Francisco, California, December 3, 1897.

PHEBE A. HEARST.

J. B. REINSTEIN, JAMES H. BUDD and WM. CAREY JONES, as Trustees appointed by Mrs. Phebe A. Hearst for the obtaining of an Architectural Plan of the buildings and grounds for the University of California, have deposited with the London, Paris and American Bank, Limited, at San Francisco, California, securities of the value of \$50,000, as a fund to guarantee the performance by said Trustees of all their promises and covenants contained in the Programme for an International Competition for the obtaining of such Plan, which Programme is dated December 3rd, 1897. The said fund of \$50,000 to be paid over and delivered only upon the order of said Trustees or a majority thereof, and their successors in interest.

December 3, 1897.

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MAPS, CASTS AND PHOTOGRAPHS.

Maps, photographs, casts, and necessary documents can be obtained from Mr. B. R. Maybeck, No. 7 Rue Honore Chevalier, Paris, France, or from the Trustees.

INFORMATION.

All requests for information should be addressed to
TRUSTEES PHEBE HEARST ARCHITECTURAL PLAN
UNIVERSITY OF CALIFORNIA
217 SANSOME STREET
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THE BEST FIREPROOF CONSTRUCTION FOR BUILDINGS OCCUPIED FOR MERCANTILE PURPOSES.

PAPER READ BY W. L. B. JENNEY BEFORE THE FIRE UNDERWRITERS' ASSOCIATION OF THE NORTHWEST.



THE SERIOUS loss in great stores during the past few years has created an intense interest among owners, underwriters and architects, as to the available methods for protection and their relative merits. This is the subject of my paper.

First we will consider the conditions that usually obtain. The great department stores are necessarily of large capacity—several stories, each floor of large area. The effect or the impression that the store makes upon customers is in proportion to the unobstructed area. This and convenience of business make subdivisions or cross walls undesirable in these retail stores, and notwithstanding the reduction in insurance rates, amounting to a considerable sum on the large amount of property, such walls are exceptional.

The contrary is the case in the wholesale stores where there is no attempt at display. The business itself is divided into departments with different clerks, so that the separation

of the building by walls, is not at all objectionable. In the retail store the shelving for the display of goods is not allowed to exceed a reasonable height, because it would have the same effect as cross walls of dividing the store. In the retail store the goods are all out of the cases and piled loosely on wooden shelves. This, together with the large areas, makes the retail store rather more hazardous than the wholesale.

In the great fire of last May in Pittsburgh, a large fireproof store was subjected to very trying conditions, the entire stock burning on several floors at the same time and intensified by the great heat from a raging fire—the burning of a large wholesale grocery store across the street to windward. This fire presents the most practical lessons that exist of the behavior of a fireproof building under the most trying conditions. Fortunately this fire has been very carefully and exhaustively reported by able experts employed as appraisers. These reports have been published in full in the Insurance World of May 8th, June 1st, and July 1st. Fire records alone are conclusive and as these reports are the basis of my argument, we will, if you please, make some extracts therefrom, as I shall have occasion to refer to them repeatedly.

Referring to the map of the burned district, Fig. 1 the

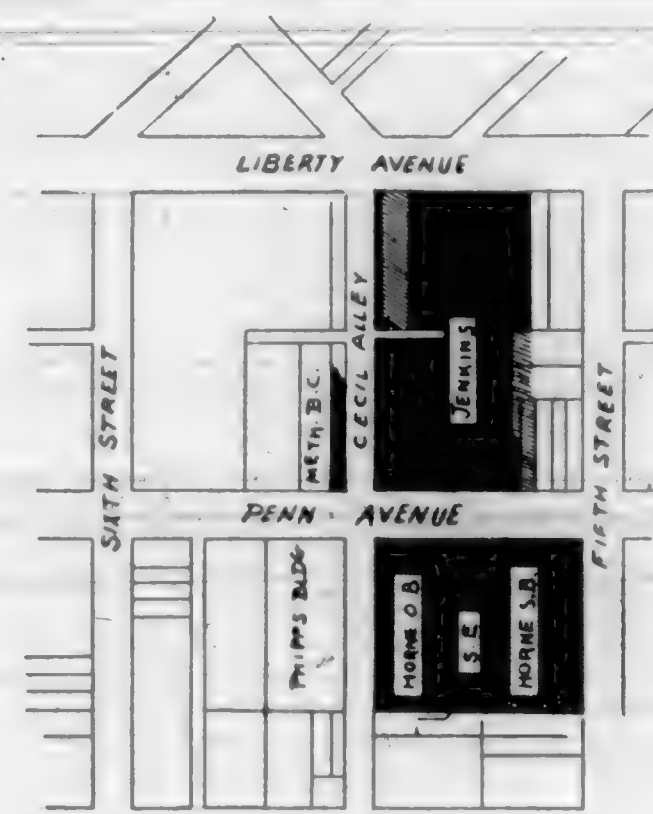


Fig. 1.

morning of May 3d, the Jenkins Building, a great wholesale grocery store filled with goods more or less combustible, some of them exceedingly so—such as oils, hams, bacon, sugars, etc.—that make a very hot fire when once thoroughly ignited—was found to be in flames. The building is reported to be what is known as "Mill Construction" without any subdivisions. When the fire was raging furiously the street wall on Penn avenue fell. The Horne store building across the street a little diagonally was of modern steel construction, each story carried independently on the columns. It was six stories above the sidewalk; the street fronts were some 60 per cent plate glass; the piers being simply steel columns fireproofed with masonry.

Instantly following the fall of the wall of the Jenkins building all the plate glass in the Horne store disappeared from the sash, and the stock was set on fire over the entire building and burned furiously. Across Penn avenue opposite the Jenkins building, was the Horne office building, four stories high, the two lower stories occupied as stores. Across Cecil alley from the Horne building was the new

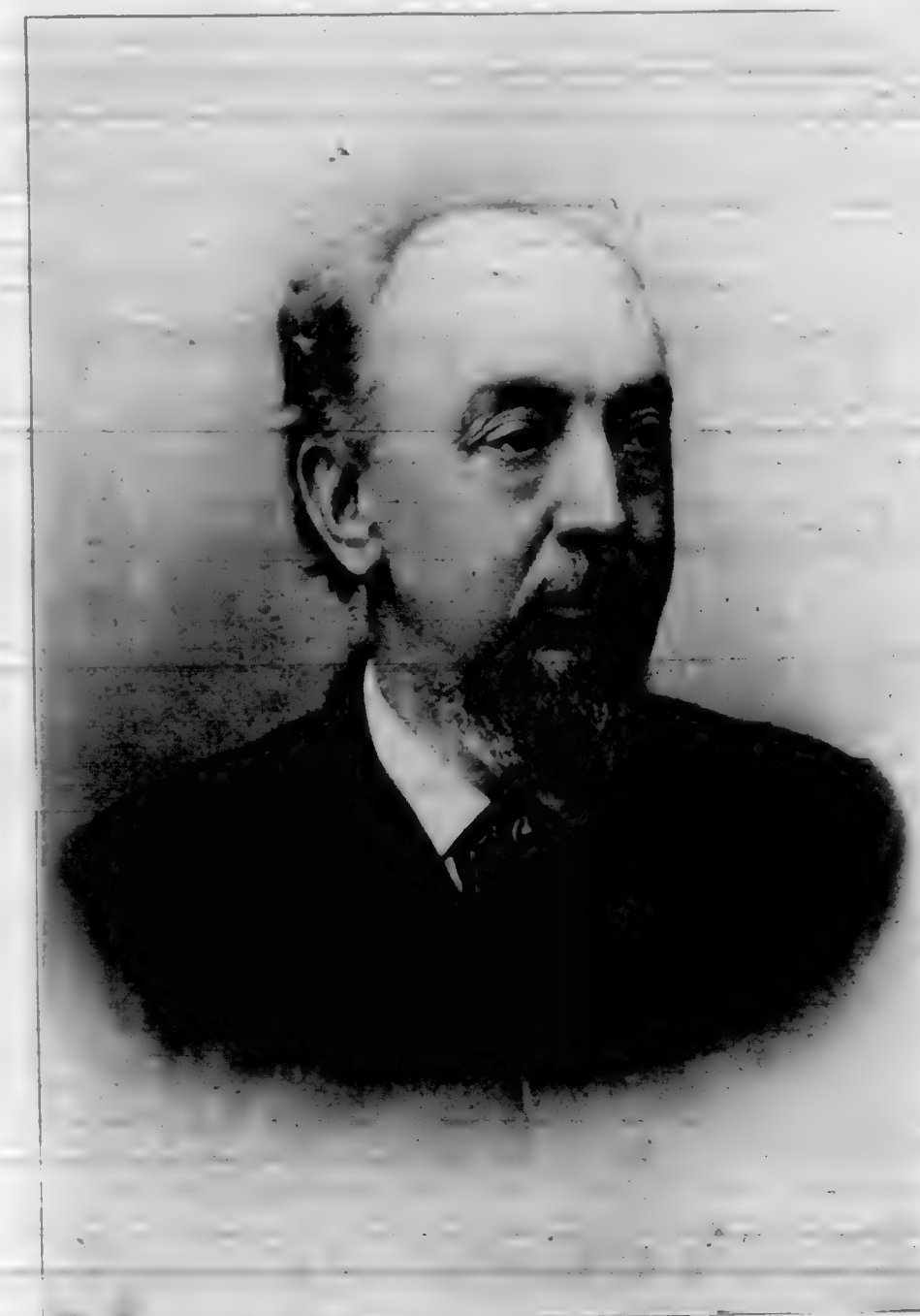
Phipps building, eight stories high, of steel fireproof construction designed for an office building, recently completed, but at the time not occupied. Immediately across the alley from the Jenkins building was the Methodist Book concern, a building of modern construction but with partitions of wood studding covered with expanded steel lathing and plaster, which, wherever exposed to the heat, was badly damaged, the result of which shows that any woodwork in such a building is a mistake. On the roof of the Horne store stood a water tank weighing some 26 tons when filled. This tank was located directly opposite the elevator shaft where naturally it was particularly exposed to the heat. The supports gave way and the tank was precipitated through the building to the first floor, carrying with it the columns and beams which it came in contact with, causing the greater part of the injury to the building.

The engineer experts, Gustav Kaufman, consulting and contracting engineer, Emil Swenson, general superintendent Keystone Bridge Works, and F. L. Garlinghouse, chief structural engineer employed by the appraisers to assist them, all men of large experience and high standing in the profession, made a very careful and exceedingly valuable report, published in the Insurance World of July 1st, from which I shall quote—

According to the report "but a few moments after the fall of the wall of the Jenkins building, both the Horne office and store buildings became a mass of flames so fierce as to drive the firemen from Penn avenue and Fifth street to the roofs of the buildings surrounding the fire. The new Phipps office building was badly scorched and the Methodist Book building above the fourth floor was completely gutted of its contents." The two Horne buildings were reasonably well constructed and the fireproofing equal to the average. The engineers report that the general effect of the fire was the wreck of the eastern side of the Horne store building, caused principally by the falling of the water tank. After the fire they found a slight lateral movement had taken place in the Horne store building although not sufficient to cause any injury to the steel; still they attribute to this movement the scaling off of many of the lower webs of the floor arches and the dropping out of much of the fireproofing on the underside of the beams and girders. They believe, however, this latter is due at least in part to doubtful methods of attachment. The columns in the building were all carefully examined with a transit instrument and by plumb observations and close visual scrutiny. The greatest deflection found at any point in a whole tier did not exceed 2 inches. The girder and beams were also subjected to the closest scrutiny and a careful record made of each and every one. Every rivet in the building that was exposed was tapped and not one loose rivet was found. All connections were also examined and were all found in good condition as far as could be determined. Material that had been subjected apparently to the greatest heat was tested by cutting out test pieces as close to the bend as practicable. These tests were made exactly as is made for the new material—the elastic limit, breaking test, extension, reduction in area, best fireproof construction for buildings, the nature of the fracture, etc. In the opinion of the board, the fire had not damaged the steel, that it had acted rather like an annealing furnace and that the material was rather improved than injured. The slight sinuosity in the various tiers of columns the engineer board does not attribute to the action of the fire alone, as possibly a small amount of it was caused by the setting, and existed originally.

This board makes its comments on the lessons taught by the fire as follows:

"First, in buildings of about this height the distortion of the steel frame work due to the heat of the fire, cannot in any instance be sufficient to work any serious damage nor is it probable that at any time would connection rivets be sheared off. This conclusion is arrived at for the reason



W. L. B. JENNEY, Architect.

that there is no probability that any future fire will be fiercer than the one at issue.

"Second, the method of fastening fireproofing to the underside of beams with sheet iron strips should be discarded.

"Third, it cannot be too often reiterated that open front buildings like this should be protected from external fires by metal shutters."

In this I fully concur. Rolling steel shutters such as those in use in the Marshall Field & Co's Wholesale store on Adams street in this city, can be readily applied to the front of a building without detriment to its architectural effect. They are easily worked. If closed every night, as in that store, they are always in order. On the rear and alley elevations the ordinary standard shutters are all sufficient. In the Pittsburgh fire wooden shutters covered with tin did good service and assisted materially in stopping the fire. The engineers also further advise "that all shafts should be provided with metal doors that can be readily closed from all floors." This is attended with serious difficulties. In many of the large department stores there is a central light shaft of considerable dimension. No satisfactory arrangement has as yet been put on the market for the closing of these large openings at each story. Even in the smaller openings of staircases, the doorways in use are scarcely adapted to retail stores. They can, however, be shut off by vertical

The inventor makes the following claims of merit:—The Heater weighs about 150 pounds and its corrugations are made to a depth of three inches, and this combined furnishes a radiating heat equal to four times of any straight back fire-place. These corrugations also cause a draft at the back of the fire where other fire-places will not burn, and increases and distributes a uniform draft to all parts of the fire, producing perfect and gradual combustion. This Heater burns hard and soft coal to a fine ash, and equal to any base-burner, stove or furnace, and will furnish fully twice the heat of any stove in the market. It is the only fire-place Heater that will start and burn hard coal and in fact any kind of fuel, without a blower, the housekeeper is thus relieved of having this article about the rooms.

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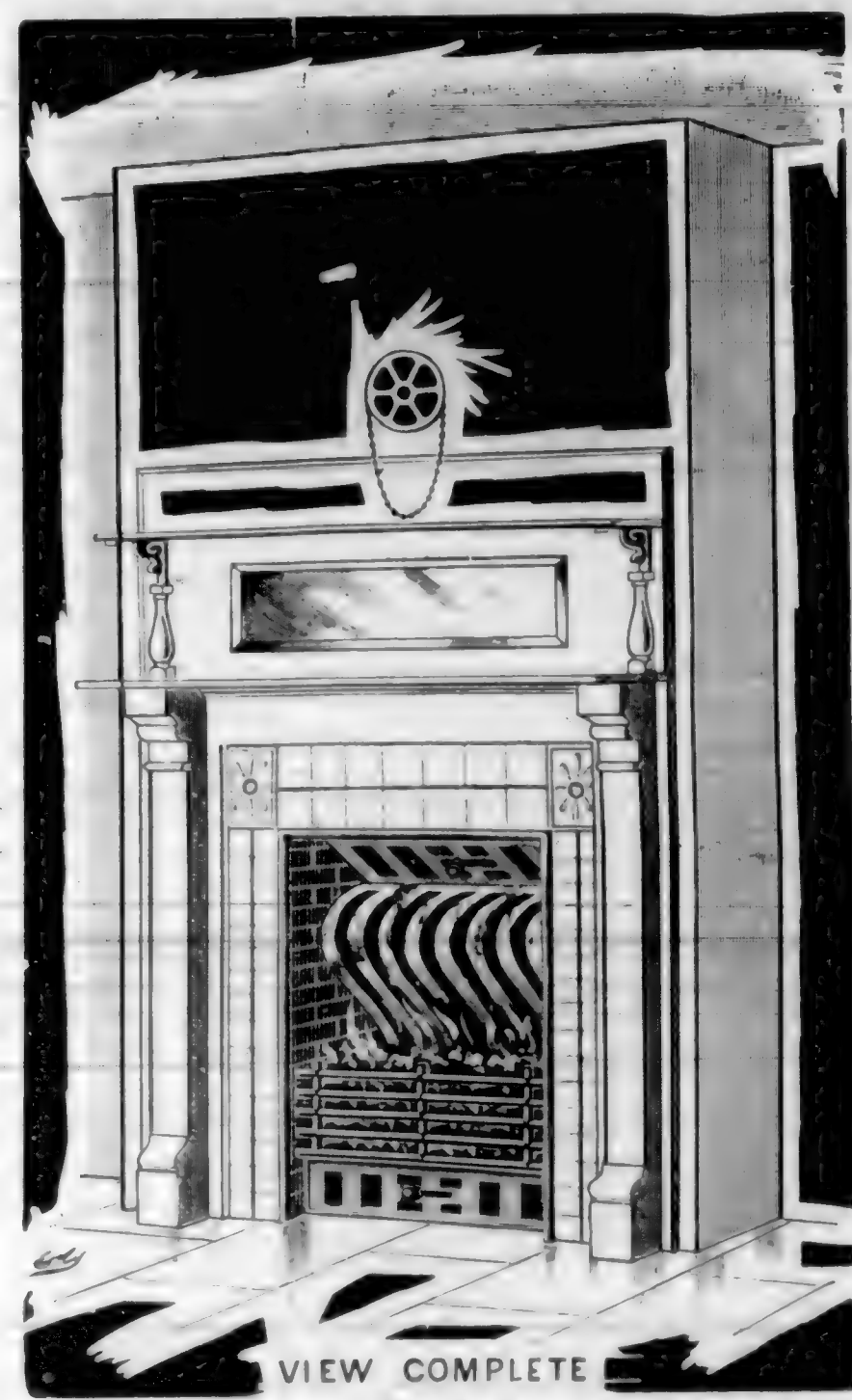


Figure 2

It works simple, and keeps fire over night equal to any stove or furnace.

When gas is used for fuel the flames roll up through the corrugations of the Heater and will heat that body red hot if desired, which causes a flow of hot air through the register that cannot be equaled by any other Gas Heater.

The discharge of hot air into the rooms with the Register located within about three feet from the ceiling forces all the cold and impure air to the floor and the suction at the open fire-place draws the same to the chimney flue and there out, thus taking out of the rooms all exhausted atmosphere, and constantly replenishing with pure heated air without exposure or drafts, and causing perfect ventilation. This feature recommends our Heaters for the nurseries and hospitals as being unsurpassed for heating and ventilating.

This Heater is economical as well as sanitary in its results. It secures warm floors and equalizes the temperature from floors to ceiling, perfect ventilation is secured.

rolling shutters between stories so that the light shaft be comes a chimney for the escape of the smoke.

Fourth, the most important lesson taught by this fire was the lack of strength displayed by the fire-clay fireproofing. The building was permitted to move in any direction without any material restriction by the fireproofing. The floor arches showed by the scaling off of the lower webs that they were unable to offer any sufficient force to counteract the tendency to lateral motion.

Fifth, the column protection although composed of the very best obtainable kind of fire clay tile was also not of sufficient strength.

In our opinion it would have been necessary to dismantle the whole steel frame work had this structure been 14 or 15 stories high. The leaning at that height at the same proportion as developed would have entailed the necessity of taking the whole structure down.

Owing to the fact that steel columns or girders or beams after being subjected to a long continued fire will assume the same temperature as fireproofing, and owing to the fact furthermore, that the rate of expansion of the steel is much greater than that of the fire clay tile, destructive movements are permitted which, as shown in this experience, will result in considerable damage and which damage will increase in direct proportion to the height of the building.

To be continued.

THE LYTLE FIRE PLACE HEATER.

FIGURE one shows a sectional view of a Lytle Heater in the fire-place. The cold air taken from outside of the building passes through a pipe into the base of a hollow corrugated iron heater, which is placed upright with its corrugations in the direction of the draft and at the back and crown of the fire-place where the greatest heat is found, which causes the supply of pure air in the air chamber to heat and rise rapidly into the hot air pipe, connecting the top of the Heater and the Register, and thence pass into the rooms through the Register. Figure 2 shows a front view of the Heater complete with its corrugated front at the back of the fire-place, and the position of the Register in the breast of the chimney.

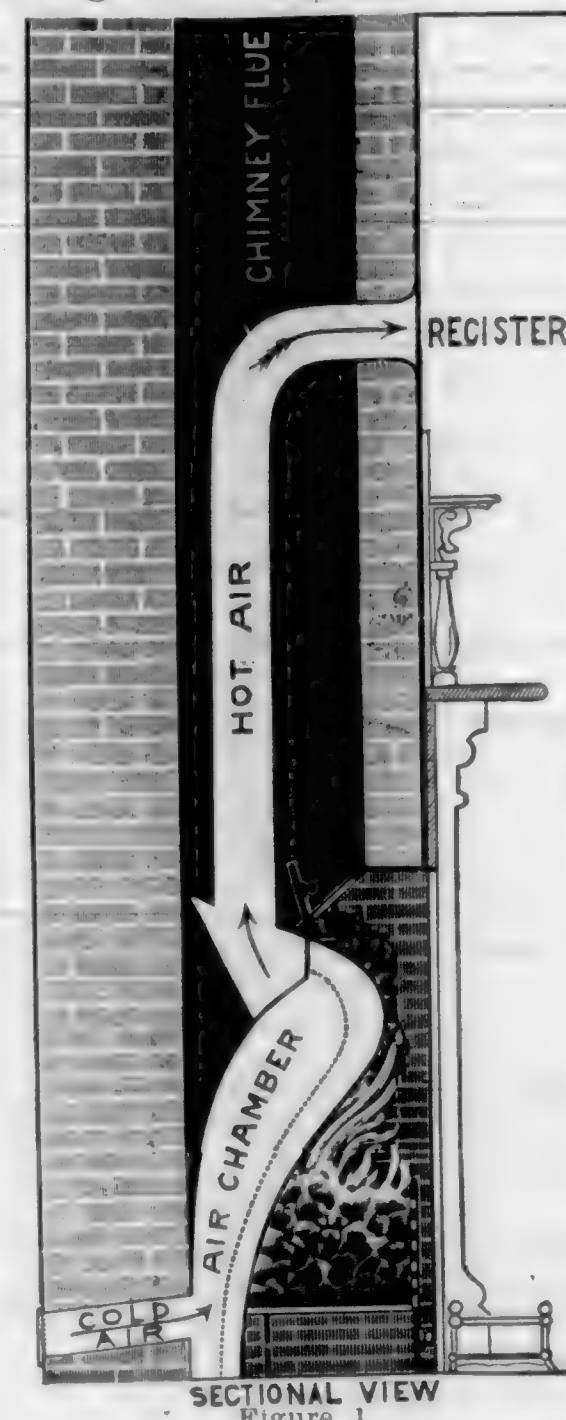


Figure 1

With the adjustment of the top and lower dampers the fire can be regulated to burn slowly and work, if desired, the entire season without rebuilding, the same as any base burner, stove or furnace. This Heater can be put into any fire-place and guaranteed to work in any chimney regardless of stove or furnace working in the same flue.

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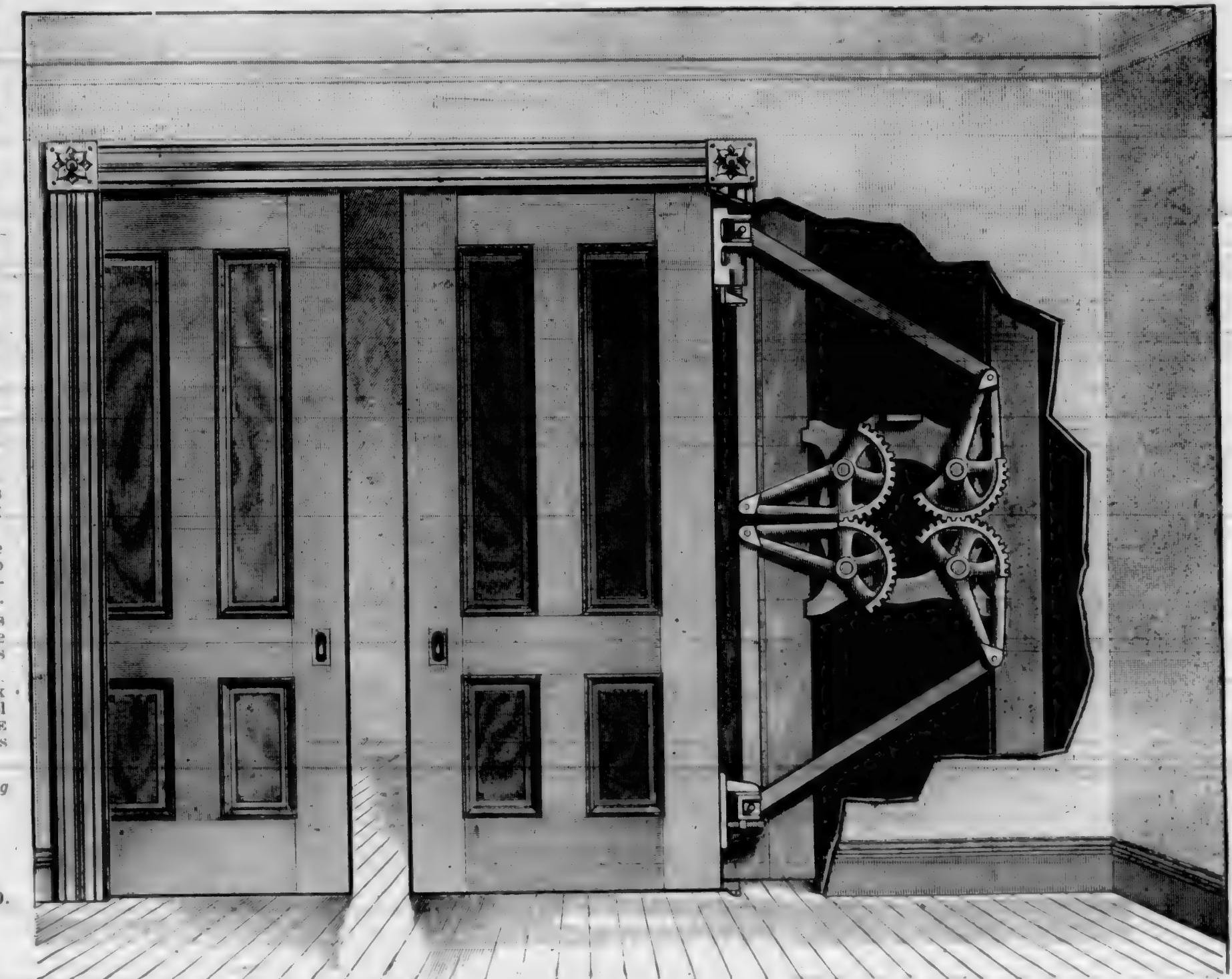
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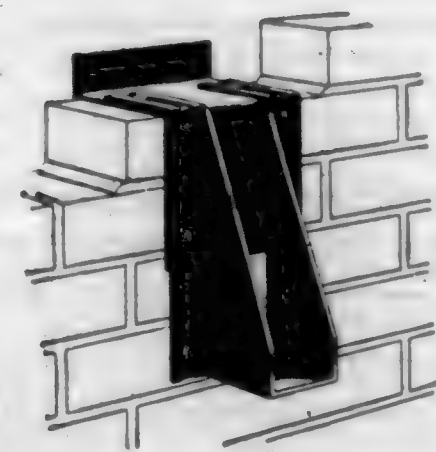
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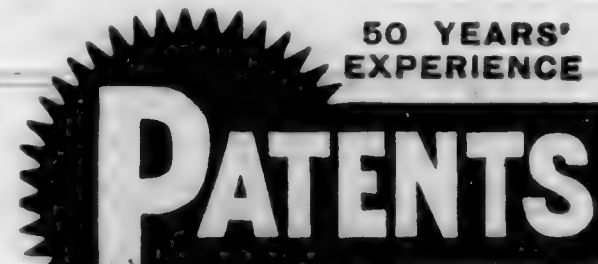
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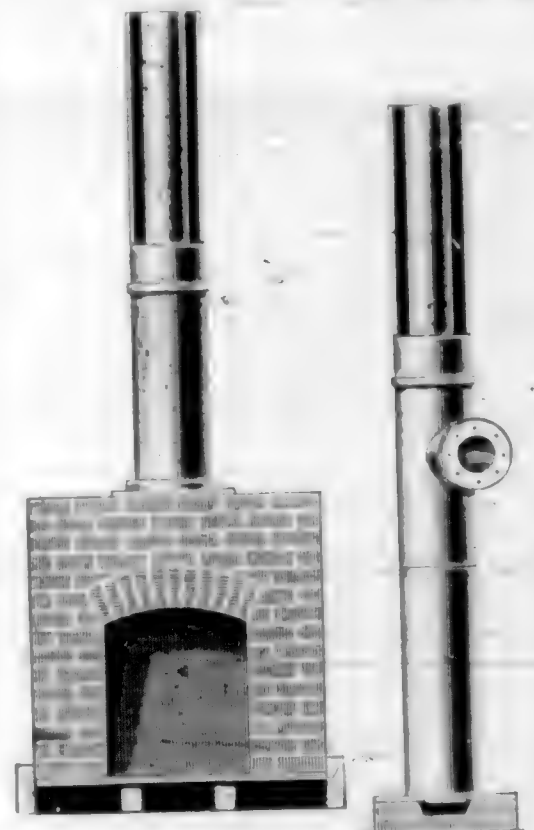
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VOLUME XIX, No. 3.

MARCH, 1898.

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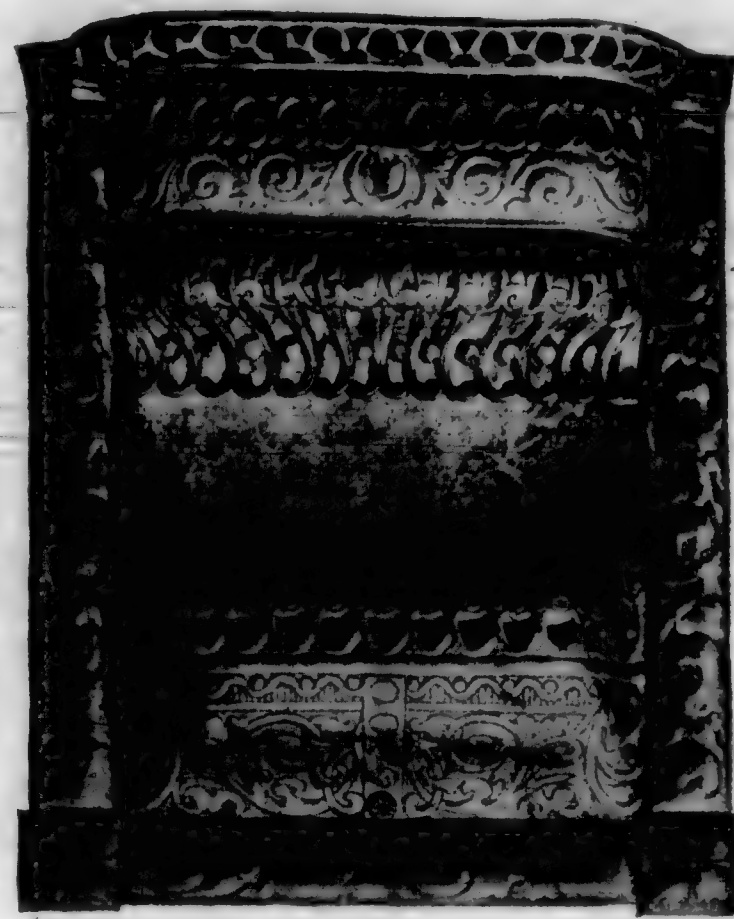
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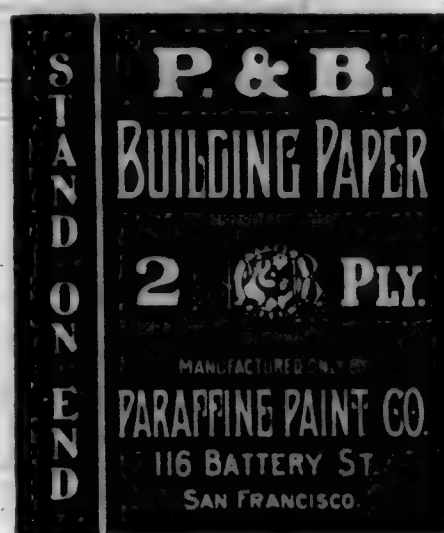
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BUILDING NEWS.

Central Ave. near Hayes. Two-story frame; owner, Z. C. Marcy; contractor, Theo. S. Hohn; signed, Feb. 28; filed, Feb. 28; cost \$343.

Cherry and Clay. To build; owner, Peter F. Dunne; architect, B. E. Remmel; contractor, Marcuse & Remmel; signed, March 8; filed, March 10; cost \$850.

Cherry and Clay. To build; owner, Peter F. Dunne; architect, J. W. Johnstone; contractors, Marcuse & Remmel; signed, March 11; filed, March 11; cost \$850.

Cherry near Miguel. Six two-story frame dwellings; owner and contractor, A. Christensen; days work; cost \$10,000.

Clayton near Hayes. To build; owner, Henry Winter; architect, P. Schwerdt; contractor, Frank Steinman; signed, March 8; filed, March 7; cost \$230.

Davis and Jackson. Foundation, plumbing, etc.; owner, John G. Gibson; agent, architect, James E. Wolfe; signed, Feb. 18; filed, Feb. 18; cost \$2834. Excavation, concrete, brick and granite work; contractor, Thomas O'Connor; cost \$2885. Steel beams, cast and wrought iron, etc.; contractor, Western Iron Works; cost \$1010.

Dupont and Filbert. Excavations, concrete and artificial stone work for three-story frame; owner, Rosa De Martin; architects, Wm. Mooser & Son; contractor, N. Ferni; signed, March 17; filed, March 17; cost \$1000.

Eddy near Devisadero. Excavations, brick and granite work, etc. for brick and stone work; owner, O. E. Brady & Son; signed, Feb. 10; filed, Feb. 10; cost \$30,000. Carpentry, steel work, etc.; contractor, Daniel Powers; cost \$19,000.

Fulton and Laguna. Brick, concrete work, etc. for three-story frame and two-story frame; owner, Chas. Stunker; architects, Martens & Coffey; contractor, C. Schutt; signed, Feb. 18; filed, Feb. 18; cost \$10,100. Plumbing, gas fitting, etc.; contractors, Gulick & Wetherbee; cost \$1235.

Fulton near Lyon. To build; owner, John J. Cunningham; contractor, Dan Einstein; signed, Feb. 26; filed, March 5; cost \$1700.

BUILDING NEWS.

Hayes near Baker. All work except plumbing, painting, etc.; owner, C. F. Ruppel; architect, Philip Schwerdt; contractor, Robert Currie; signed, March 14; filed, March 15; cost \$288.

Henry near Castro. All work except painting and varnishing; owner, David Behrend; architect, T. J. Welsh; contractor, Wm. Plant; signed, March 16; filed, March 17; cost \$1825.

Kearny street, no. 36. All work except cast and wrought iron work for alteration to four-story brick; owner, L. Lowenberg; architects, Sahlfeld & Kohls; contractor, Val. Franz; signed, Feb. 18; filed, Feb. 18; cost \$890.

Laguna and O'Farrell. Three-story frame, flats; owner, L. Kutner; architect, W. J. Cuthbertson; contractors, Kinread Bros.; signed, March 15; filed, March 18; cost \$5250. Excavation; contractor, Union Paving Co.; cost \$175. Brick cellar; contractor, W. A. Butler; cost \$328.

Laguna and Birch. To build; owner, William A. Middlehoff; architects, Martens & Coffey; contractor, C. Schutt; signed, March 8; filed, March 10; cost \$10,000. Plumbing, gas fitting, etc.; contractors, Allen & Loomie; cost \$1785. Painting, etc.; contractor, Joseph Stroegen; cost \$950.

Leavenworth and Chestnut. Six two-story frame dwellings; owner and builder, W. Knopf; days work; cost \$30,000.

North Point near Larkin. To build; owner, John Marcolla and wife; architect, H. Hess; contractor, P. Demartini; signed, March 12; filed, March 13; cost \$1720.

Octavia near McAllister. To build; owner, J. P. Pichon; architect, J. Goulet; contractor, R. Currie; signed, March 4; filed, March 18; cost \$4794. Brick work, etc.; contractors, Peacock & Butcher; cost \$1245.

Octavia and McAllister. Carpentry, glazing, etc.; owner, Mrs. C. M. Berger; architect, G. A. Berger; contractor, D. H. Matheson; signed, Feb. 24; filed, March 1; cost \$4655.

Market and O'Farrell. Repairs; owner, Phelan estate; superintendents, Mahoney Bros.; day work; cost \$12,000.

BUILDING NEWS.

Mission, Frances, Alemany Av. and Croke St. To build church and house; owner, Rev. R. M. Pigneri; architects, Shea & Shea; contractor, L. Cereghino; signed, Feb. 14; filed, Feb. 19; cost \$3407.

Mission and 1st. Alteration and repairs; owner, Mrs. Leah Meyer and Phillip Meyer; contractor, C. A. Duebel; signed, Feb. 26; filed, Feb. 28; cost \$122850.

Mason near Eddy. Additions and alterations; owner, R. J. Techau; architect, C. M. Rousseau; contractors, Campbell & Pettine; signed, Feb. 24; filed, Feb. 28; cost \$10,000. Painting, etc.; contractor, M. L. McCord; cost \$907. Electrical work; contractor, S. E. Gaslight Co.; cost \$900. Mason work and house moving; contractor, Theo. Butler; cost \$11,000. Plastering; contractor, John Robertson; cost \$740. Galvanized iron and tile work; contractor, W. Crenan; cost \$628. Iron work, etc.; contractor, R. Lutge; cost \$2675. Plumbing, etc.; contractor, E. J. Lawton; cost \$1900.

Mission and Second. Window frames in six-story brick; owner, Wells Fargo & Co.; architect, Percy & Hamilton; contractors, Burnham-Strandford Co.; signed, March 10; filed, March 12; cost \$1010.

Mission near 17th. Finishing up three-story frame; owner, Sol. Nathan; architect, Copeland & Pierce; contractor, Petterson & Person; signed, March 13; filed, March 14; cost \$3465.

Montgomery and Sutter. Alterations; owners, W. S. Goodfellow, J. S. Angus, T. G. Crothers, Executors J. G. Fair estate; architects, Tharp & Holmes; contractor, J. Tronson; signed, March 1; filed, March 1; cost \$2748.

Page near Clayton. To build; owner, Mrs. Nellie E. Mitchell; architect, William Koenig; signed, March 12; filed, March 12; cost \$4300.

Page near Buchanan. To build; owner, Marcus Getz; contractor, Ed. Cox; cost \$7100.

Page near Webster. To build; owner, Mrs. Nellie Burnell; contractor, Philip Rive; signed, March 3; filed, March 10; cost \$3600.

Page near Greenwich. To build; owner, George Keiner; architect, H. Gelfuss; contractors, W. Horstmeyer & Co.; signed, March 16; filed, March 16; cost \$2375.

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BUILDING NEWS.

Pine near Buchanan. To build; owner, S. Lindner; architect, C. M. Rousseau; contractor, R. J. Pavet; signed, March 14; filed, March 14; cost \$6200.

Pine near Devisadero. Three-story frame; owner, H. E. Brown; contractor, C. W. Duffie; signed, March 7; filed, March 7; cost \$5500.

Post near Polk. Three-story brick; owner, Dudley Tait; architect, R. Swain; contractor, F. A. Williams; signed, Feb. 21; filed, Feb. 23; cost \$777. Sewers, plumbing, gas fitting and tiling; contractors, Gulick & Wetherbee; cost \$1130.

Sacramento near Maple. To build; owner, J. L. Ballan; architect, H. B. Mitchell; contractor, C. Andressen; signed, March 7; filed, March 9; cost \$1181.

Sacramento near Maple. To build; owner, James Ryan; architect, T. J. Welsh; contractor, W. R. Kenny; signed, Feb. 28; filed, Feb. 28; cost \$4310.

Scott and Lloyd. Alterations and additions; owner, Mrs. C. C. O'Neil; architect, Edward A. Larsen; contractor, Wm. Bell; signed, March 8; filed, March 11; cost \$1140. Plumbing, etc.; contractor, H. Williamson Co.; cost \$410.

Second and Mission. Hard and Chrome steel vault linings, etc.; owner, Wells Fargo & Co.; architect, Percy & Hamilton; contractor, C. B. Parcells; signed, March 3; filed, March 5; cost \$7880.

Spear near Folsom. Brick building; owner, H. E. Bothin; architects, Percy & Hamilton; contractor, J. A. Smile; cost \$3685.

Sutter near Stetler. To build; owner, Mrs. M. Wolfen; architects, Kenitzer & Barth; contractor, H. Behrens; signed and filed March 18; cost \$4760.

Sutter near Laguna. Alteration and additions; owner, William Miller; architect, M. J. Welsh; contractor, D. Currie; signed, Feb. 21; filed, Feb. 23; cost \$2815.

Sutter near Laguna. Alterations and additions; owner, E. K. Ash; architects, Havens and Toepke; contractor, S. E. Boyle; signed and filed, Feb. 18; cost \$2488.

Stearns near Mission. Excavation, etc.; owner, John F. Boyd; architect, McDougal Bros.; contractor, Healey, Tibbitts & Co.; signed and filed, March 5; cost \$9400.

Stockton and Lombard. Alterations; owner, H. Kohler; superintendent, Henry Behrens; days work; cost \$5500.

Stockton street no. 210. New storefront; contractor, John Wren; cost \$1000.

Stockton near Geary. Plumbing, etc.; owner, Pierre Prie; architects, Pissis & Moore; contractors, Duffey Bros.; signed, March 8; filed, March 9; cost \$3310.

Webster near Union. Cottage; owner, William A. Matheson; architect, R. H. White; contractor, Petterson & Person; signed, March 7; filed, March 9; cost \$1729.

Webster near O'Farrell. Alterations and additions; owner, Mrs. Carlotta Gaudin; architect, C. M. Rousseau; contractor, Geo. C. Nall; signed March 2; filed, March 4; cost \$4800.

Taylor and Washington. To build; owner, Mrs. W. Louisa; architects, Elsie & Moore; contractors, Bignami & Masow; signed, March 14; filed, March 15; cost \$11,380.

Turk near Buchanan. Alterations and additions; owner, Gabriel A. Abraham; architect, A. J. Barnett; contractor, W. Paterson; signed, March 10; filed, March 16; cost \$2100.

BUILDING NEWS.

OAKLAND

Thirty-Sixth near Grove. To build; owner, Arthur Beckett; contractor, John P. Beckett; signed, March 7; filed, March 17; cost \$2800.

Adeline near 101A. To build; owner, Meyer Levy; architect, C. A. Doss; contractors, Schley & Doss; signed, March 2; filed, March 4; cost \$3000.

Park Ave. and Frederick. Cottage; owner, Mrs. E. A. Davis; architect, Reeves Davis; contractor, Ben. O. Johnson; signed, Feb. 10; filed, Feb. 13; cost \$1075.

Adams Point, lot 13, block 5. To build; owner, F. M. Umphred; architect, D. F. Oliver; contractor, S. A. and H. W. Norman; signed, March 7; filed, March 8; cost \$3887.50.

Mr. Jacob Levi, of San Francisco, who last week purchased the Wilcox Block at 8th and Broadway, with the two-story frame building on Ninth street, the lot being 100x150, intends to remodel the block into office building.

The Builders' Exchange have passed out of existence—discouraged and shut up shop. Lack of interest, owing principally to the great depression of the building trade, together with a tight money market and consequent failure to pay dues—principal causes.

EAST OAKLAND

Hanover near Newton. To build; owner, Thomas Cowell; architect, W. Budson; contractors, L. E. Campbell, R. H. Falmer; signed, Feb. 11; filed, Feb. 24; cost \$1278.

Jackson near Lake. Plumbing, etc.; owner, E. G. Lukins; architect, Clinton Day; contractors, W. S. Snook & Son; signed, Feb. 28; filed, March 1; cost \$1795.

ALAMEDA

Bellevue tract, lot 11, block D. To build; owner, C. L. Robinson; architect, Geo. A. Bordwell; contractor, signed, Feb. 17; filed, Feb. 21; cost \$2146.

Clinton Ave. and Walnut. Two-story frame; owner, A. B. Pau, Jr.; contractor, E. D. Judd & Co.; cost \$4300.

San Antonio Ave. near Paru. Two-story frame; owner, Geo. T. and Sophie L. Wright; contractor, A. W. Pattiani & Co.; cost \$4798.

Benton near Santa Clara. To build; owner, G. A. Rosenberg; architect, M. G. Bugbee; contractor, Theo. Vectors; cost \$1880.

St. Charles near Louisa. To build; owner, Geo. F. Hever; contractor, F. Bammann; cost \$1850.

St. Charles near San Antonio. Carpentry work, etc.; owner, F. W. Voegt; architect, B. E. Remmel; contractor, D. S. Brehaut; cost \$3500.

The Bray school district have cleared away the obstructions that were blocking the way to the issuing of bonds for the new \$13,000 school house. Everything now looks favorable for building operations to begin in the near future.

SAN LEANDRO

The County Supervisors have decided to build a concrete arch bridge at San Lorenzo creek, opposite the Meek place.

The plans of architect Smith for a new laundry building at the County Hospital have been accepted and operations will be begun at once.

Cotton Bros.' plans for the new Webster street bridge have been accepted by the supervisor as approved by the Navy Department.

BUILDING NEWS.

BERKELEY

The highlands, block 1, lots 7 to 10. To build; owner, H. W. Hawley; architect, F. D. Voorhees; contractor, Stetel & Mohr; cost \$3284.

SAUSALITO

Block 5, lots 1 to 3. To build three two-story frames; owner, Charlotte Winsor; architect, Albert Sutton; contractor, Mallory & Swenson; signed, Feb. 17; filed, Feb. 23; cost \$4061.

SANTA ROSA

Judge Dougherty and Mr. Shea will erect in the near future a handsome business block on the lots purchased by them last week of Mrs. S. A. Loucks.

STOCKTON

Downing & Horne, architects are receiving bids at 3 p. m. to-day for a two-story frame residence to cost \$3000 for Daniel Harris to be erected on Vine near El Dorado streets.

The following buildings have just been completed and accepted by Geo. Rushforth, architect: The six room brick school building cost \$11,000 for the trustees of the South School District, and the new hotel and passenger depot at Jamestown, containing 64 rooms and costing \$25,000 for the Jamestown Improvement Co.

The handsome store building to be occupied by the owner D. S. Rosenbaum of this city, is just completed at a cost of \$5000. W. W. Oates was the architect.

FRESNO

Chas. Beasley & Son, architect of Stockton has just completed plans for a business store to be erected in Fresno for W. Parker Lyon & Co. bids for brickwork, concrete and sidewalk lights are now called for, the front will be constructed entirely of metal, with aluminum sash bars and plate glass and the bids for this and other work will be called for in a few days.

AUBURN

H. C. Herpell, Chas. Keena and Anderson Brothers, will soon build cottages.

REDDING

R. S. Jewell is soon to erect another fine modern cottage of six rooms, brick basement for laundry, wood, etc.

Sacramento parties are soon to commence the erection of a large lively stable and office building on Buile street. There are to be six suites of modern offices above with broad stairs looking up from the street.

F. P. Primm, attorney, will erect opposite the Temple Hotel an office building, stores on first floor of modern methods of construction.

The Episcopal Society are now securing funds to build a new church and to raise \$10,000.

Dr. Kohn will erect a two-story brick, store and office and home above.

Hon. E. Frisby, banker, is having ten fine cottage constructed to relieve the demand for houses that is on the constant increase.

Masonic Building Assn. will make many improvements in their building.

GAZELL—Denney Bar Parker Co. will build a large brick store and ware house two story early this Spring.

KENWICK—There will be two brick buildings go up early this Spring; this town has built over 200 houses and 50 business buildings in the past year.

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LOS ANGELES

SAN JOSE

BUILDING NEWS.

LOS ANGELES

Architect F. L. Roenig has prepared plans for Joseph J. Gill, of Pasadena, of a two-story, ten room residence, to be erected on North Madison avenue, near Kirkwood, the estimated cost is \$7000.
Architect J. N. Preston is preparing plans for Robert Walker, of a cottage to be built near Thomson street and Union Ave.
Architects Austin & Skilling have prepared plans, for Harvey Cox, of a two-story nine room residence, white cedar inside finish, plumbing, gas and electric lighting; to be erected on Thirtieth near Hoover.

BUILDING NEWS.

Architects Morgan and Walls are preparing plans for L. A. Thompson, of a twelve room two-story residence, to be built at Kensington Road and Douglass street; it will be complete with all modern conveniences and will have maple floors, plate glass windows, hardwood inside finish, gas and electric lighting.
Plans are being prepared for the Los Angeles School of Osteopathy, of a large two-story frame building, which will be used as a school for the instruction of pupils, to be built on Figueroa street.
Architect Krause and Jenkins are preparing plans

BUILDING NEWS.

for Easton, Eldridge and Co. of two additional cottages, to be built in the Menlo Park Tract.
Sixteen sets of plans were submitted to the trustees of the First M. E. church in response to their call to architects. The first meeting for the purpose of examining them was held on Saturday evening. Each architect is allowed thirty minutes to explain the best points of his particular set; as it will require a number of meetings to examine the large number presented. It will be at least two weeks before a decision can be arrived.

PORTLAND CEMENTS: "JOSSON." "WHITE STAR."

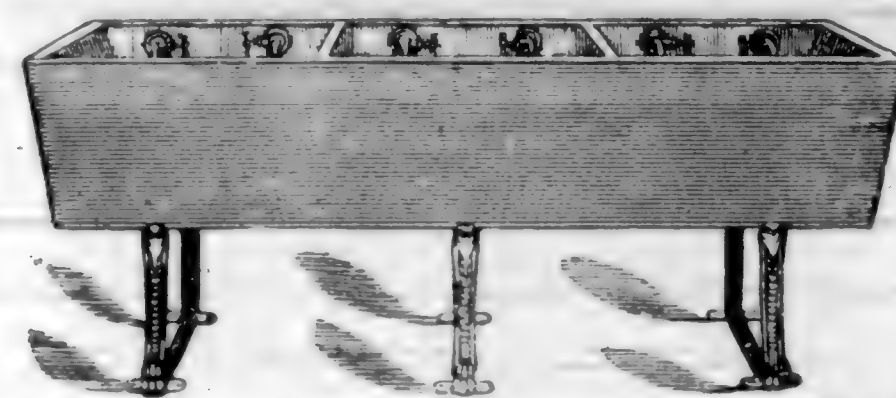
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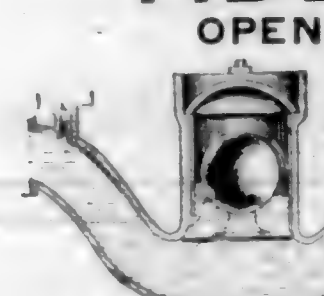
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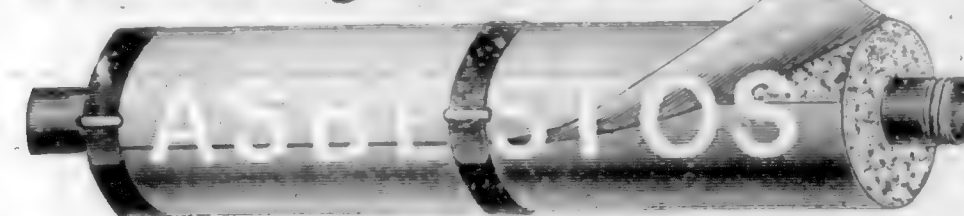
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NUMBER 3.

A MONTHLY JOURNAL DEVOTED TO THE ARCHITECTURAL INTERESTS OF THE PACIFIC COAST.



SINCE our last issue Mr. E. H. Burrell has succeeded to the interests of Mr. Tom M. Grant in THE CALIFORNIA ARCHITECT AND BUILDING NEWS. Mr. Burrell now being the sole lessee and publisher while Mr. Grant is retained by him as the Editor. All bills against the paper will be paid by Mr. Burrell, and all moneys due and coming due are to be paid to him.



THE GENERAL tendency of business for some years past has been, for a smaller number of individuals as principals, to do a larger business at a smaller profit. But in the business of contracting to build, the tendency has been, on the contrary for a larger number of individuals to do a smaller business, at no profit at all, and often at a loss. This does not often fall upon the contractor, because a large majority have nothing to lose. These conditions have naturally reduced the number of responsible and experienced contractors; many of whom have abandoned the business voluntarily, while others have been obliged to do so, after

sacrificing their legitimate accumulations in the throat, cut purse scramble we call competition.

It is claimed by some sufferers that the prevailing conditions have been the result of a grasping disposition on the part of owners; others again insist that architects are to blame in encouraging incompetent, irresponsible bidders. But it must be remembered that the system, if we can call an anarchistic state of things a system, has encouraged incompetent, irresponsible people who have failed at other employments, to adopt the calling of contracting, or the profession of architecture; and it is not wonderful if these disturbers of the peace and prosperity of a community, should combine to get a living at other peoples' expense.

We believe that no improvement can be hoped for as long as the "Lien Law" is in force. The law relieves every body connected with a building operation of responsibility, though it is ostensibly intended to fix responsibility and protect innocent parties. In practical operation it enables any impecunious person to get credit and bonds, in order that he may have the handling of the funds to be distributed, often pro rata; in consequence of the impossibility of doing the work at the contract price, or because in the handling, too large a percentage has adhered to his sticky fingers. Sound business principles are always in the long run, stronger than any statute that conflicts with them, and that