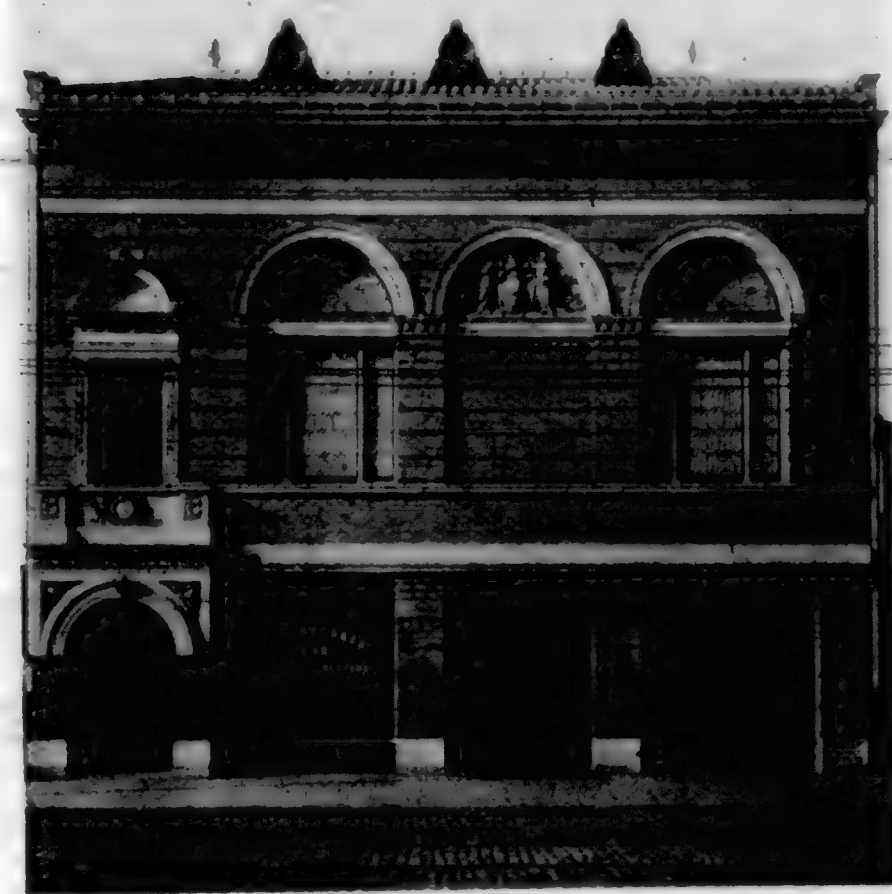


is all of gold with fillets and ornament burnished, and is covered with grayish white silk, lighter and warmer in tone than the walls, with patterns of colored flowers. The foot of the bed is covered with white silk, and the hangings are all of white silk, with a border of yellow, light green and rose.

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.

LONDON, PARIS AND AMERICAN BANK, LIMITED.
San Francisco, California.

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
SAN FRANCISCO, CALIFORNIA.

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

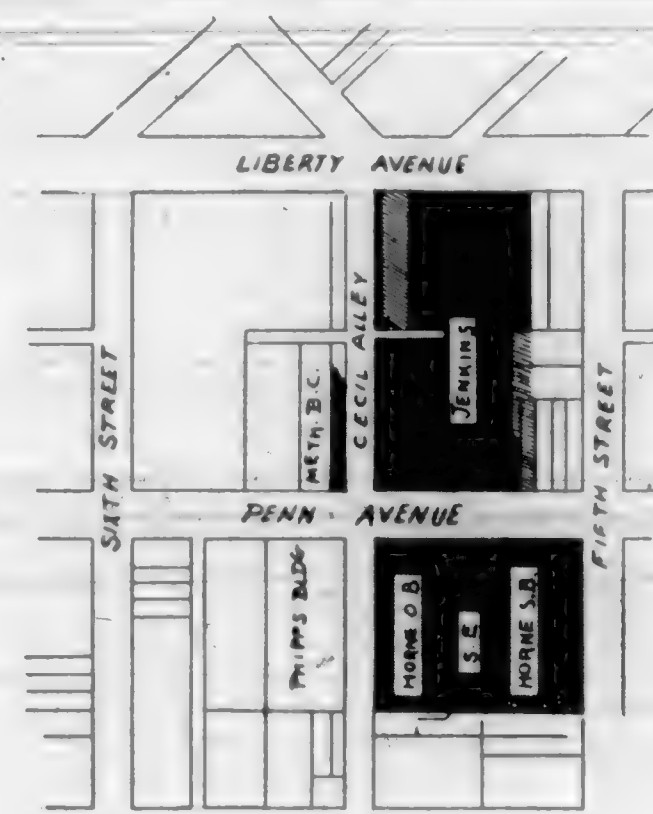


Fig. 1.

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

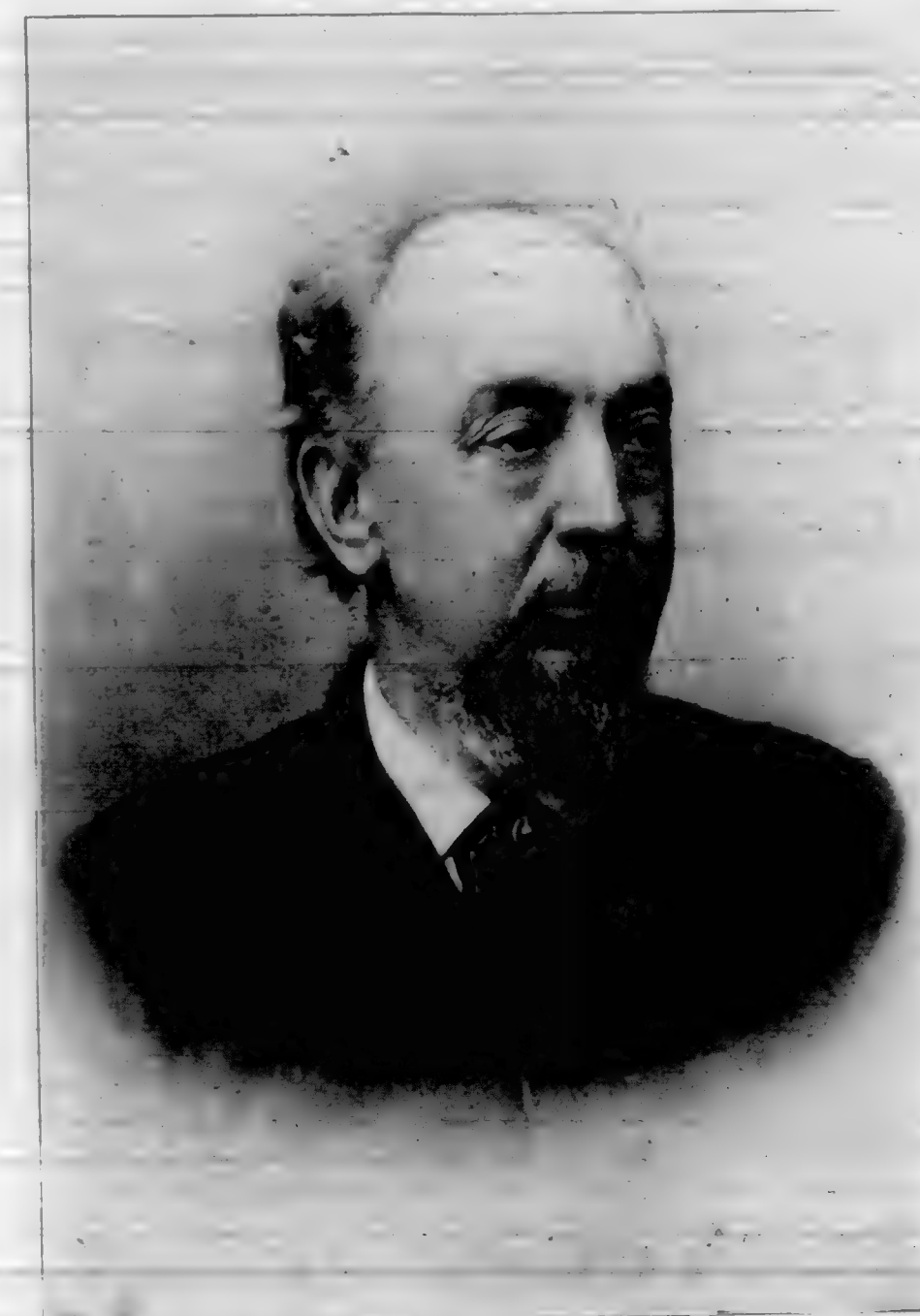
Phipps building, eight stories high, of steel fireproof construction designed for an office building, recently completed, but at the time not occupied. Immediately across the alley from the Jenkins building was the Methodist Book concern, a building of modern construction but with partitions of wood 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.

By the use of the Lytle Heater perfect and slow combustion of fuel is secured and 95 per cent of the heat is utilized.

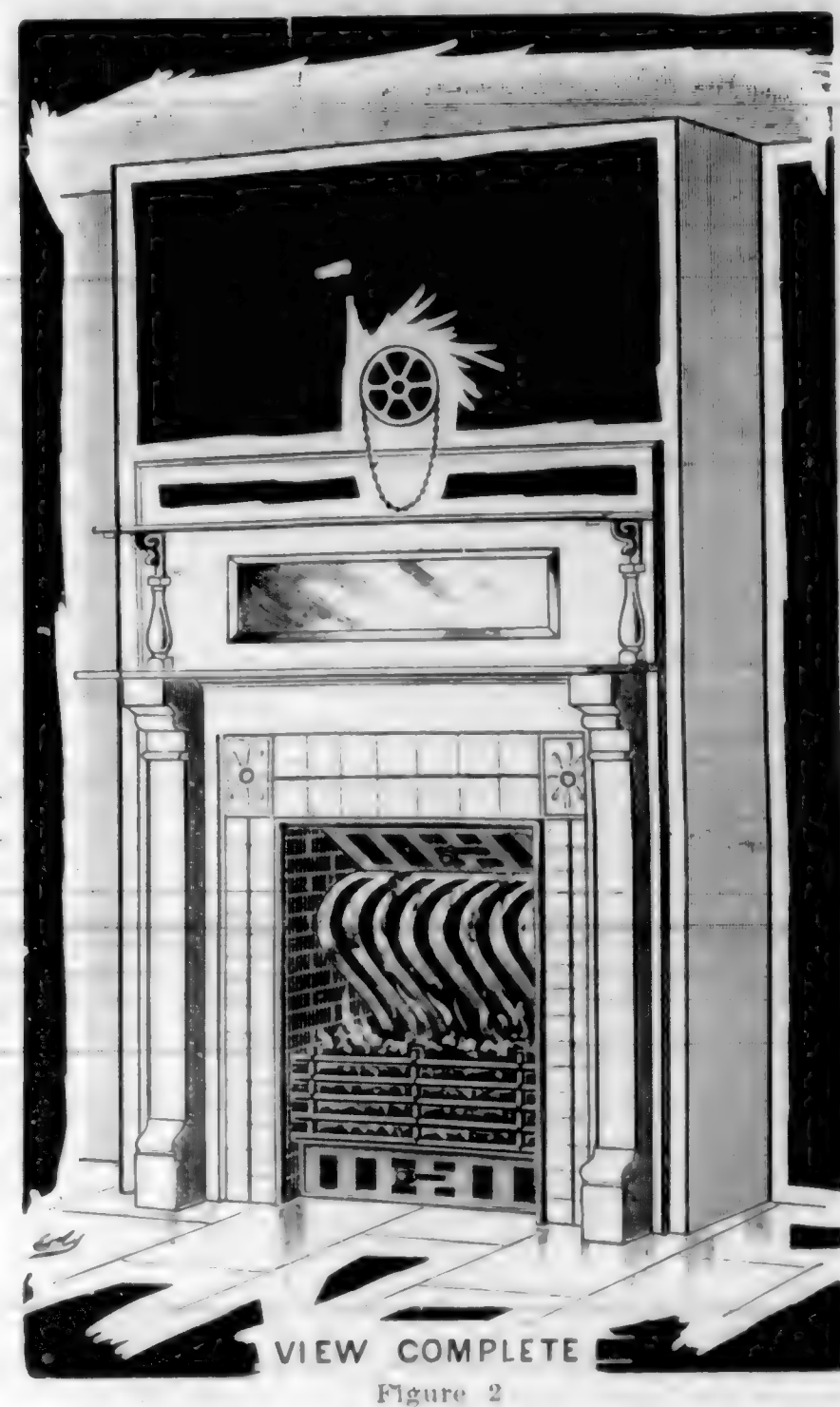


Figure 2

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

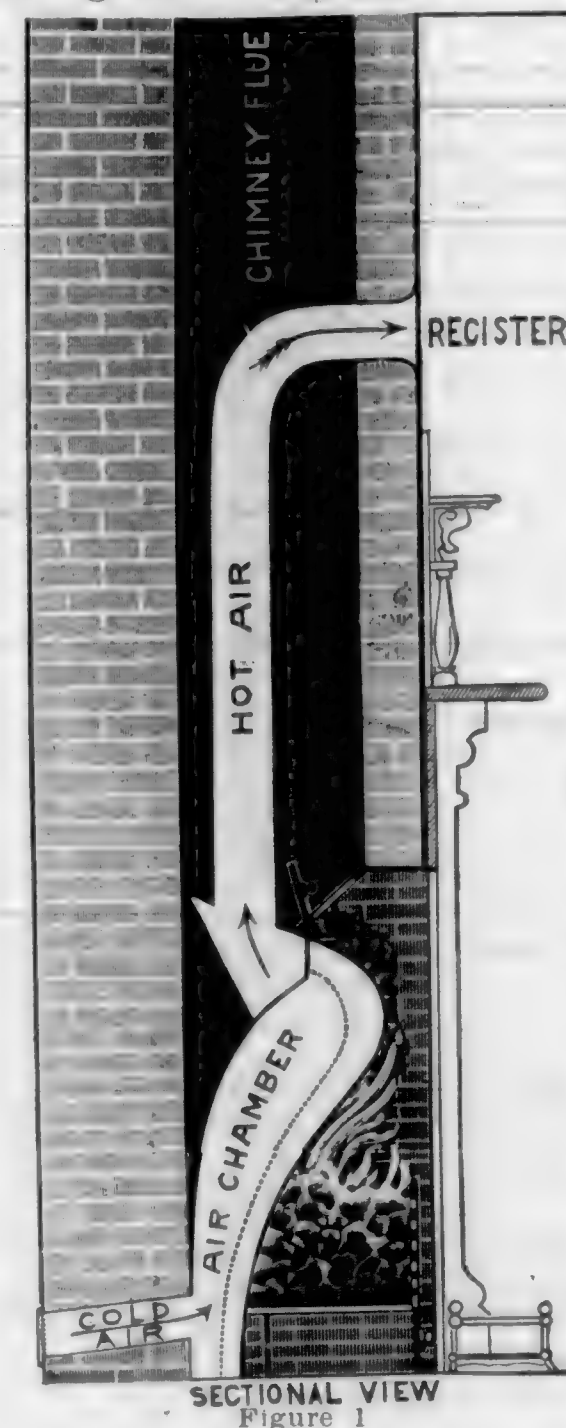


Figure 1

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.

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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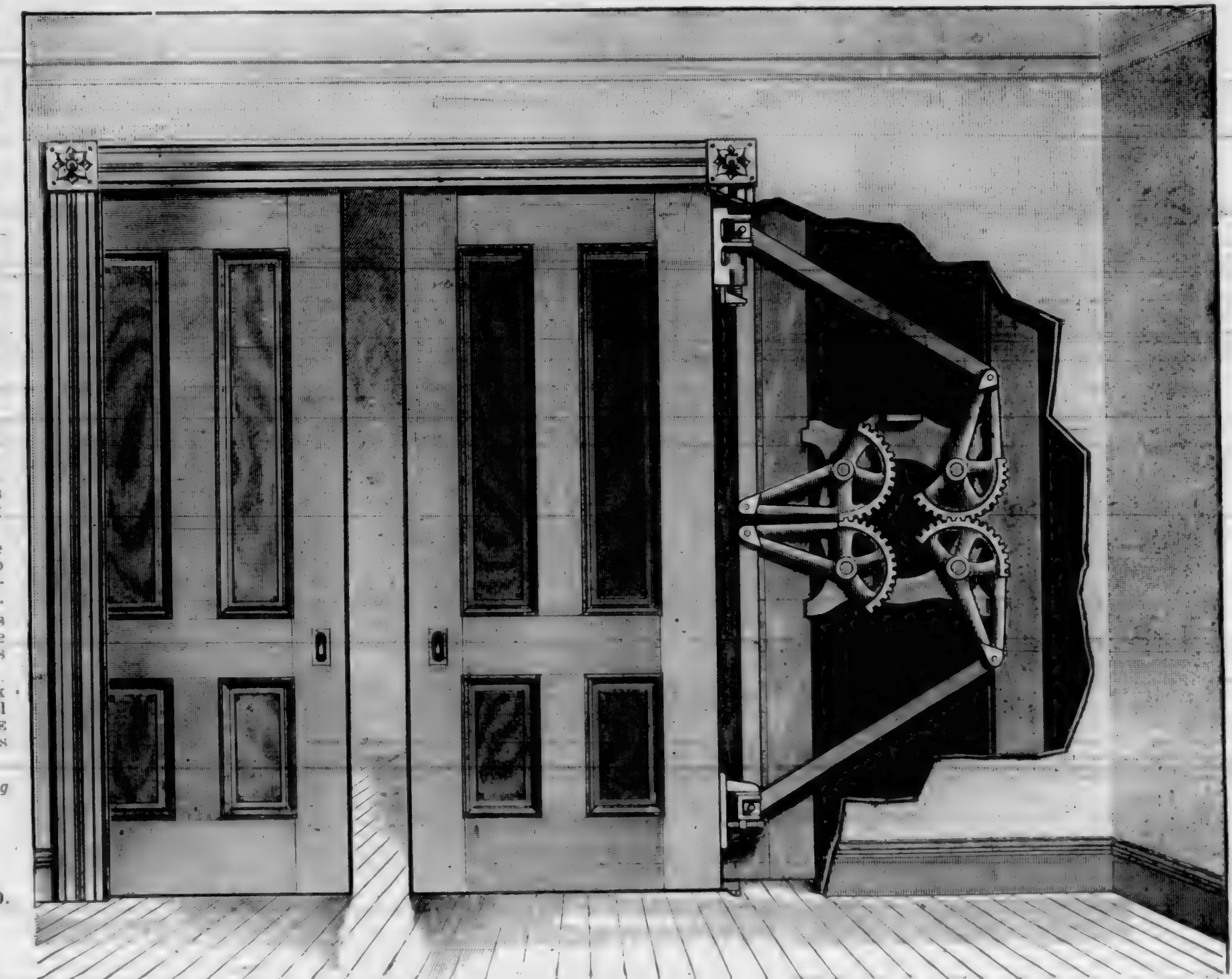
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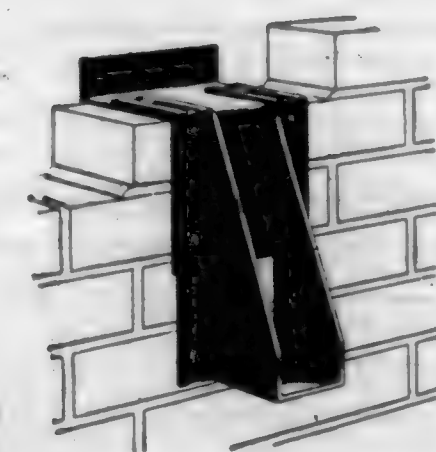
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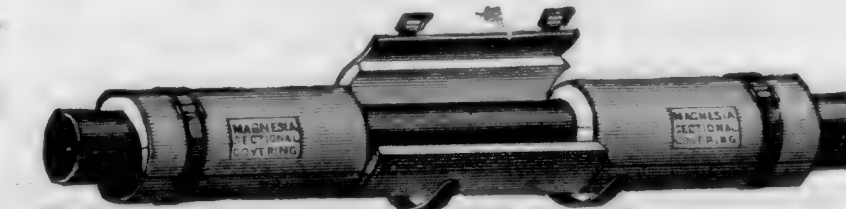
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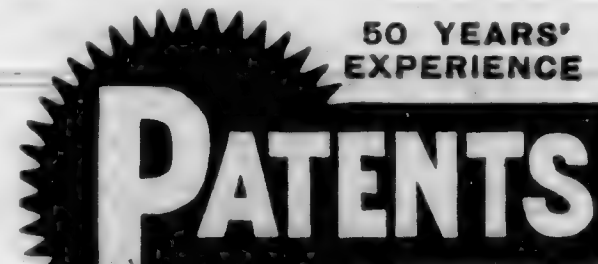
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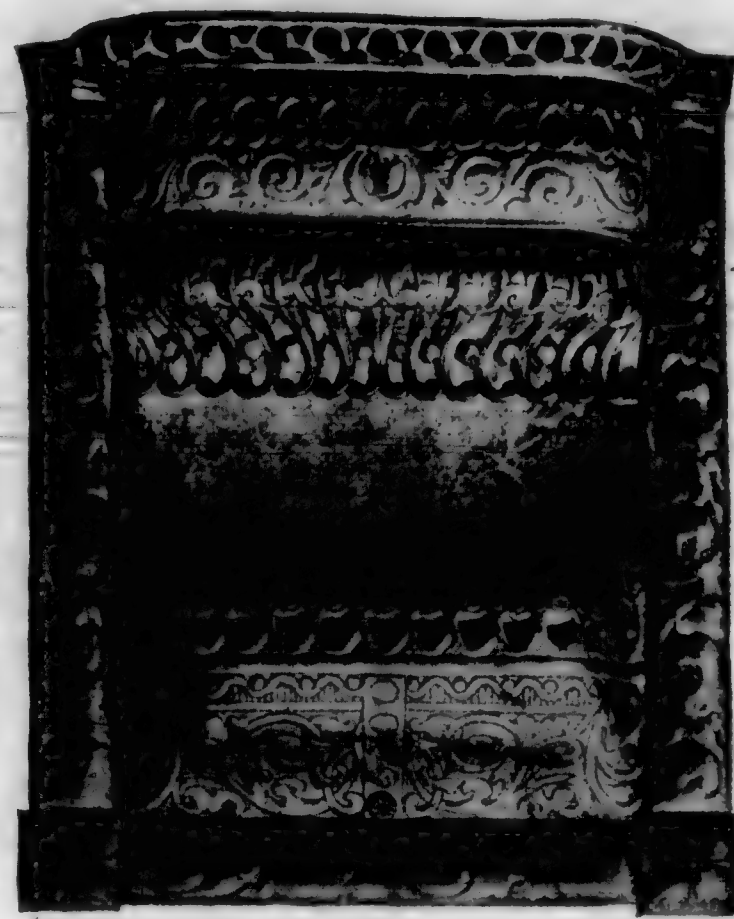
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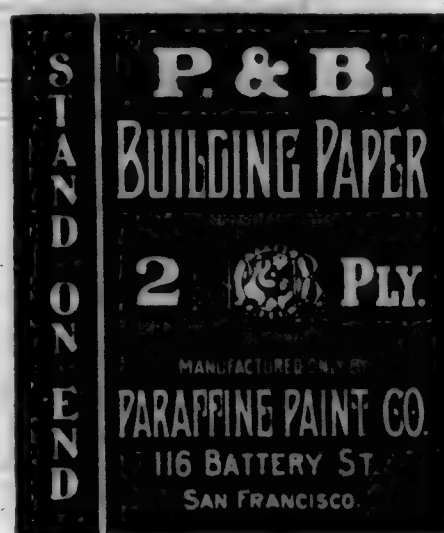
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OFFICE: 40 NEW MONTGOMERY ST.

SAN FRANCISCO, CAL.

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 \$1730.

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. Pierini; 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. Gellfuss; contractors, W. Horstmeyer & Co.; signed, March 16; filed, March 16; cost \$2375.

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ABEL HOSMER, SECRETARY

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S. W. Cor. 7th and Castro Streets, Oakland.

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. H. 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 15; 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.

GENERAL INDEX OF ADVERTISEMENTS.

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Building and Loan Assn. Gunsburger, Emil. xv	Lumber. Sierra Lumber Co. vi	Sewer Pipes. Gladding, McBean & Co. xi
Brick Preservative Cabot's. xiii	Magnesia Pipe Covering DeSolla Dressing Co. xi	Sewer Traps Fullam, G. C. viii
Cement. W. R. Grace & Co. xiii	Mantles Tiles, Etc. Montague & Co., W. W. xiii Bateman. xiii	Sash Lines. Samson Cordage Works. xvi
Cement Trays Bradley, Bros. xiii	Metal Lath Western Expanded Metal Lath and Fire Proofing Co. iv	Shingle Stains. Cabot's—C. J. Waterhouse—Agent. xiii Pacific Refining and Roofing Co. iii
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Furniture and Upholstery. Bateman, W. xvi	Plumbers' Materials. Budde, Joseph. vii	Tin Roofing. N. & G. Taylor Co. ii
Hard Wood Pingst, Fred L. iii	Plumbers and Gasfitters. Hobro, W. D. xiv Budde, Jos. vii Gulich & Wetherbee. iii	Ventilators. N. & G. Taylor Co. ii
Heating and Ventilating W. Morgan & Co. xii		Water Closets. Budde, Joseph. vii
		Window Cord. Samson Cordage Works. xvi
		Wood Preservative Cabot's. xiii Pacific Refining & Roofing Co. iii

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SAN FRANCISCO

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.

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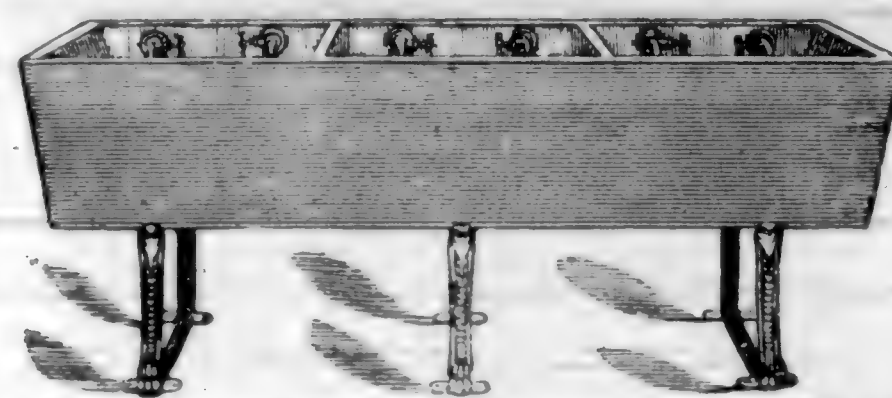
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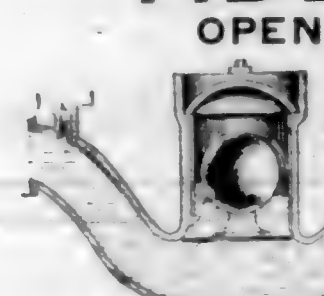
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THE CALIFORNIA ARCHITECT AND BUILDING NEWS
\$3.00 PER YEAR
PUBLISHED ABOUT THE 20th OF EACH MONTH
BY
E. H. BURRELL LESSEE, PUBLISHER.
OFFICE 408 CALIFORNIA ST. SAN FRANCISCO CAL.
ESTABLISHED IN 1879. NOW IN THE NINETEENTH YEAR. INCORPORATED 1889.

VOLUME XIX.

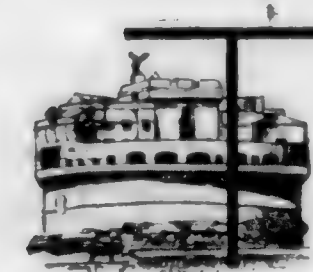
MARCH 20th, 1898.

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.

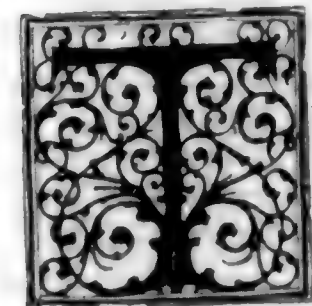
It is claimed by some sufferers that the prevailing conditions have been the result of a grasping disposition on the part of owners; others again insist that architects are to blame in encouraging incompetent, irresponsible bidders. But it must be remembered that the system, if we can call an anarchistic 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

attempts to prevent their action. This is what might be expected, because business principles are the result of the experience of the world for ages, and have become a natural force that can be counted on, like the law of gravity; and any attempt to ignore it or defeat it, brings confusion to the man or class, who make the attempt. It has been believed that the Lien Law was a necessary protection, first to the journeyman mechanic against the misfortunes or dishonesty of his employer; the contractor; then to the sub-contractor against the same. The business community has, however, discounted the practical working of this elaborate machinery to entrap an unwary owner into paying for twice as much as he receives. A counter machine of bonds, and retention of contract money, together with time limits, and other technicalities, was soon set up; and while the expenses and uncertainties of building for all concerned, have been increased by this legislation, and counter legislation, the inevitable net result has been to increase unscrupulous competition; or rather to turn the business into a gambling scheme, as devoid of business principle as a bluff in a game of cards.

The fact is that the Lien Law is class legislation, and as such has been pronounced unconstitutional by the Supreme Courts of more than one State. The Supreme Court of the State of Ohio used this language in a decision in 1897:—"No court can see that it is for the common public welfare that the liberty of contract should be taken away from the owner of a building to enable the seller of materials to collect their value from a man who never purchased them, and who has already fully paid the one with whom he contracted for all that he received."

It will be seen that without a lien law, business would be transacted on the usual basis. Bonds would not be expected, because owners would take only the usual business risks in employing contractors—and these risks would be mutual. Hence only responsible parties could engage on either side, and remuneration would be adjusted as real compensation.



THE United States Circuit Court of Appeals for New York, has held that the burden of proof is on the fire insurance company to prove as a defense that the insured building fell before the fire. It may be doubted if this decision is in the interest of good honest building. The underwriters have a clause in their policies providing that insurance shall immediately cease in the event of a fall of a building, except a fall caused by fire.



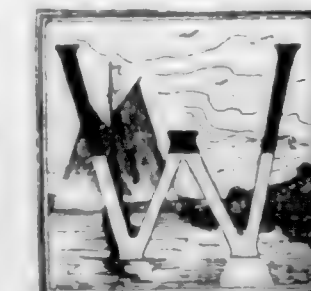
FOREIGN fire offices in this country have earned a good reputation for careful underwriting, fair settlement of losses, and prompt payments. They pay their share of taxes and bring capital to the country. We have examined the figures of litigated claims, and find that the percentage resisted by foreign companies is the same low average (less than two per cent) as that of the American companies. In some quarters, not altogether creditable, there are signs of a disposition to make war on the foreign companies, by levying a discriminating tax on their receipts. This narrow, inhospitable spirit is not shared by the respectable American companies' managers. Our readers may confidently accept the indemnity of foreign companies, with

the assurance that the security is first-class, that the capital invested here is needed and beneficial, and that the foreign underwriters supply a demand which our home companies and home capitalists are unable to fully supply. It is not true that the foreign underwriters are supplanting American underwriters. The percentage of premiums paid the former remains substantially the same year after year. It is about thirty. The amount of money sent home is surprisingly small. The profits, which average only three per cent of the premiums, are nearly all invested in this country. When a Commissioner of Insurance descends to abuse of foreign insurance companies, which furnish such safe indemnity, his misrepresentations and alleged arguments may be dismissed as the screed of a demagogue who is open to the conviction of the "hush money" argument.



THE BUILDING LAW passed over a year ago in St. Louis has gone into operation, and in future buildings in that City will be limited to one hundred and fifty feet the same as in Chicago.

There has been much discussion in many cities in recent years concerning this subject of limiting the height of buildings. In Chicago this resulted in limiting the height, just as it did in San Francisco, and now the New York Legislature has had a bill before it limiting the height in New York City. It has been whispered that some of the extremely tall buildings in New York and Chicago have shown signs of insecurity that have caused the architects and owners a degree of uneasiness which requires a constant and very careful watch to be kept upon every point. Nor is the fact to be wondered at, when it is considered that some of these buildings are erected on a base so small as practically to assume the form of towers, rather than of buildings. The St. Paul building in New York for instance is 300 feet high, with a frontage of 39 feet, the proportion of base to height being thus nearly one to ten, so that the building has about the proportions of an ordinary lead pencil. Here in San Francisco there is but one building that approaches like proportions, and while that towers up to a height of 310 feet it has a base of 71x73 feet, the proportion of base to height being one to a trifle over four. The St. Paul building is an exaggerated case, but there are a large number of buildings in New York and Chicago between 250 and 300 feet in height which are built on lots of less than 100 feet front.



WE PRINT herewith a view of the elevation of the New Ferry Depot Building, of which Mr. E. R. Swain is the Supervising Architect and the State of California the owner, by the grace of its board of Harbor Commissioners.

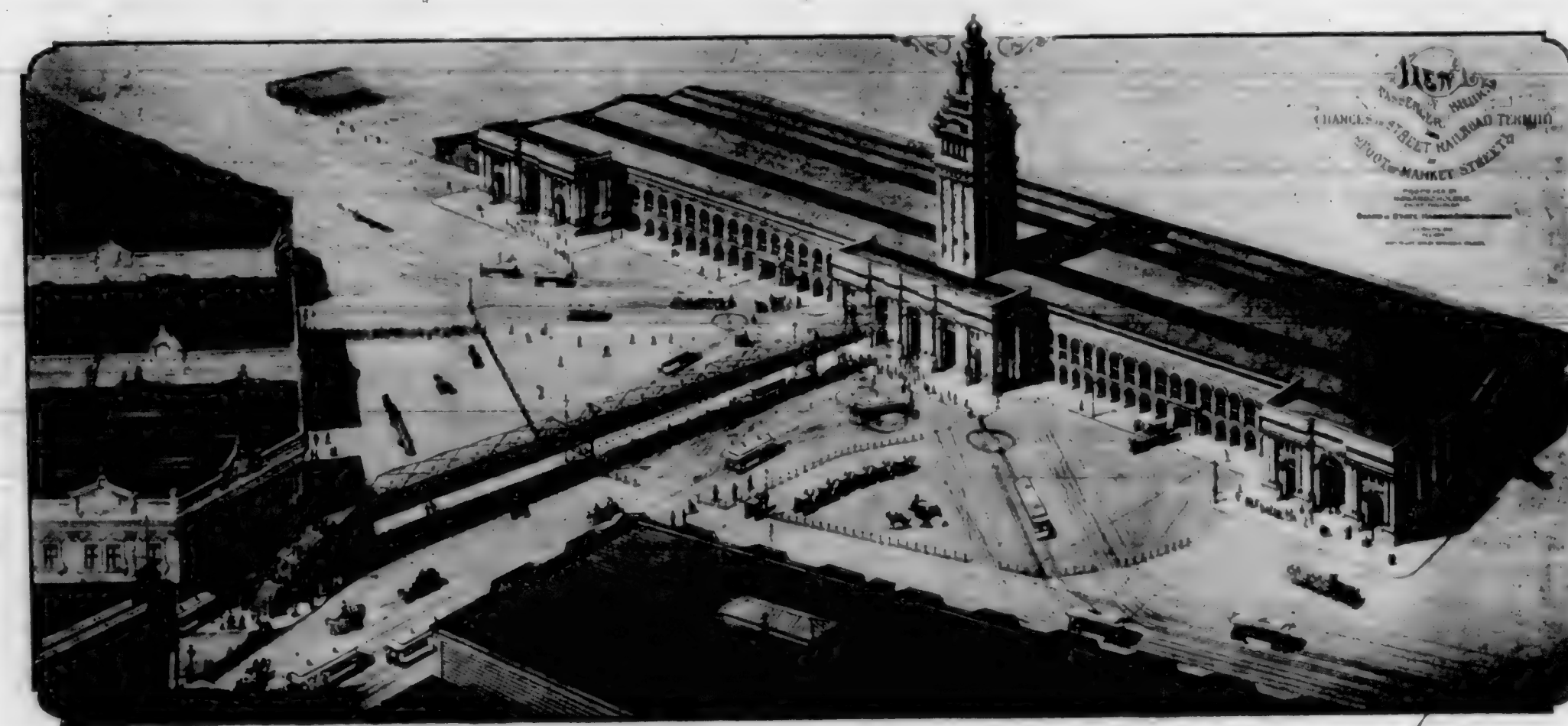
A morning paper would have us believe, and all of its many thousands of readers believe, that in the building of this ferry depot every official of the State, save one, and every contractor, save one, who has had anything to do with the construction, was a bribe taker or a bribe giver, all equally guilty in a gigantic criminal conspiracy to defraud the State out of thousands of dollars.

Many of these contractors, all in fact, with whom we have

a personal acquaintance, have lived in this City for many years, have engaged actively in their several lines of contracting, raised respectable families, accumulated some property, paid their just debts and have been considered, by their fellow men as good and law abiding citizens.

With the business standing or reputations of the State officials who are in anyway responsible to the State for their acts in connection with these alleged frauds, it is not within the province of this journal to deal, probably they are fully up to the average successful politician as he exists in this State to-day, no better and no worse. They at least may be trusted to look after their own affairs, first, last and all the time, and in doing this it is hardly to be credited that they would undertake the carrying out of all these alleged frauds in such an open and bare faced manner as the morning paper would have us believe.

Mr. E. R. Swain, the Supervising Architect of the depot



building, has practiced his profession with unvarying success for something like thirty years. His position for several days, while under fire, must have been a most trying one, but he proved himself equal to the occasion, and after breaking his seal of silence and coming out into the open, assumed responsibility for all the changes that have been made. He says:

"As the architect of the board, it is my duty to see that the contractors do their work according to the plans and specifications under which their contracts were secured. It is also my duty to attend to all details in consideration with any changes in the plans or specifications that may be contemplated or agreed upon. In doing this I have endeavored to use my best judgment and to have in view the best interests of the State.

"Every change that has been made in the original plans and specifications for the ferry depot building has been at my suggestion or has received my approval. Allowances made to contractors have been made upon my estimates or have received my approval. In other words, all of the work upon the building has been under my supervision. If the Board of Harbor Commissioners, or through it the State, has been victimized by contractors, then I must be either a fool or a knave."

This is direct, straightforward and to the point, and surely is not the utterance of a guilty man nor of that of a fool. On the contrary it has the true ring about it, and must,

most assuredly, be given more credence than can be given to charges of corruption and fraud, based upon information furnished by disgruntled contractors, "discharged-for-cause" employees, politicians out of a job, and politicians of opposite political faith who believe in and are always looking for the addition-division-and-silence-end of every proposition in which the State is the paymaster.

As no stream has ever been known to rise above its source how are we to believe that the information furnished the *New Call* can be any more trustworthy than its source. While that paper readily enough gives out the name of its so-called marble expert it masks behind "an eminent authority" the master spirit of all the technical knowledge that has appeared in its columns, illustrations included. This clearly would not be the case unless for cause. The name of a reputable architect given to the community as sponsor for the correctness of the *New Call's* charges would

make the charges of fraud and corruption assume another color entirely, and would have carried weight and conviction wherever that paper was read. But as the case stands now the contrary effect is the result, and motives are more looked for and discussed than the charges themselves. There can be but one conclusion regarding this "eminent authority" and the *New Call's* reasons for giving out these technical reports in the anonymous form they have always assumed. It is more than probable that this "eminent authority" would not be entrusted by the proprietor of that paper to build an out-house, that he never has built to that extent for him nor for any member of the family, and what is more, doubtless, never will.

We have excepted in the second paragraph of this article one contractor and one official as being beyond the pale of the *New Call's* charges of fraud. If it is to be presumed that they alone are innocent of all the number that are connected either as officials or contractors, with the ferry depot building, the interesting thing is to know how they escaped their share of the hot pitch.

The excepted official being no other than Mr. Howard C. Holmes, chief engineer to the Board of Harbor Commissioners, whose duty it has been since the inception of the project to guard the interests of the State. Mr. Holmes is not only a very capable engineer, but is a man whose integrity and honesty has never been impugned by the press of this

City, which in view of recent events, and his long services in an official capacity to the State is a remarkable record and one of which he can well be proud.

Yet all the changes of note that have been made at the ferry depot building, have been submitted and passed upon by Mr. Holmes, and upon his approval final action taken by the commissioners and the changes ordered made. For the changes in the floor construction which the *New Call* denounced as a job and a fraud one day and then took it all back, the next, Mr. Holmes assumes his full share of the responsibility. And still the *New Call* has only good words for the Chief Engineer, (who has been "the man in the door" for the commissioners) notwithstanding the fact that these so called fraudulent charges were passed upon and approved by him.

Taking either horn of the dilemma the *New Call* gets the worst of the argument for it is not to be admitted for a moment, that an honest, keen and shrewd official like Mr. Holmes could pass upon and approve these changes of record without knowing their true character, nor could the object for which such changes were made miss being brought home to him.

The one lone contracting firm, who, as mentioned in the second paragraph, has so far escaped the *New Call's* wrath and hot pitch, were the contractors for the foundation walls and included with them, of course, is the side partners who furnished the cement.

So, summing up the whole case, we find that somewhere between February 1 and March 12 the president of the Harbor Commission; in his capacity as Editor of the *Stockton Evening Mail* bore down in its columns in his usual suave, ax-handle manner upon the anomalous political position occupied by the young inexperienced managing Editor of the *New Call*.

The y. i. m. editor to get even and make the Chesterfield of the Harbor Commissioners and rural Editor eat his words or feel the mighty power of a truly Metropolitan Daily, in looking about for the means to an end, which would mean the political end of the rural Editor for all time, pounced upon the new ferry depot building as the most available mark.

The *New Call's* reserve force, the regular force and the irregular force were then equipped with one sided instructions and turned loose upon an unsuspecting community, since which time it has been told day after day, in double column display and in editorial array that the contractors whose records are printed herewith, are robbers, jobbers and conspirators for crooked work.

Here, for instance, is a fair sample of the opening sentence that starts the ball rolling every morning:

From amid the mass of robbery, jobbery and crooked work that has marked every stage in the progress of the construction of the new ferry depot building, etc., etc., *ad libitum, ad nauseam.*

All this and more, daily, of the same category, notwithstanding the fact that many of these contractors had acquired honorable distinction in their several walks of life before the y. i. m. editor was born.

But of what avail is your good name, of what avail is mine, of what avail is anything in this work-a-day-world of ours, until the mighty pent up rath of this y. i. m. editor has been appeased, the insult biotted out, and the political death of that rural writing and publishing Harbor Commissioner, an accomplished fact.

By all means let us have an investigation, but let it be

thorough and complete. If the Grand Jury is the proper legal authority, then let that body take up the matter, by selecting a commission composed of reputable architects, who can act openly and above board, and whose report when made public will convince the people of this State that the truth and nothing but the truth, has been told in their report. As to the various sums of money that have been saved to the State by the numerous changes and the disposition thereof, let that also be the subject of exhaustive investigation by the Grand Jury, and no matter where the lightning strikes, "let no guilty man escape," say we.

THE CONTRACTORS.

Western Expanded Metal Co., D. E. Garrison, Jr., Pres.; C. F. Runyon, Vice Pres.; Gen. S. W. Backus, Sec'y. and N. L. Bell, Manager.

The Pacific Bridge Company—C. McCarthy, Sec'y. Established 20 years and have never had a law suit of any kind.

W. W. Montague & Co. for forty years the leading house in their line on the Coast—C. Adolph Low, Geo. A. Low and the heirs of the late Admiral Baldwin are the partners.

Bateman Bros., fifteen years in the business of contracting.

Ed. B. Hinds—contractor for rolling gates and shutters. Established 12 years. His work at the Claus Spreckels Building is his best reference.

Wm. Cronan—Established and doing a successful business for twenty years.

Duffy Bros., established 20 years. The class of work they do can be seen at the Mills, Claus Spreckels, Mutual Life, Emma Spreckels and Supreme Court buildings.

OBITUARY.

WE REGRET to have to record the death of Mr. Augustus Laver, senior member of the firm of Laver & Mullany. He was a native of London England, and was over sixty-three years old when his useful career was ended. He was a F. R. I. B. A., a member of the A. I. A. and of the Masonic fraternity. As an architect he had an international reputation being associate architect of the Parliament Buildings at Ottawa, Canada and the New York State Capital at Albany. On the occasion of the selection of his plans for the City Hall of San Francisco, he settled in California and has been identified with the best and most solid architecture of that city ever since. His works here are too well known to need enumeration but we may mention—the residences of the Flood family, both in San Francisco and Menlo Park—the Flood and Montague buildings on Market street and the O'Brien Mausoleum.

Of his character the best encomium that can be made is that he was in every respect a gentleman, his manner was courteous and polite to all and the community has lost in him a good specimen of the upright citizen, the Architects a worthy exponent of the dignity of their profession. More than this nought need be said.

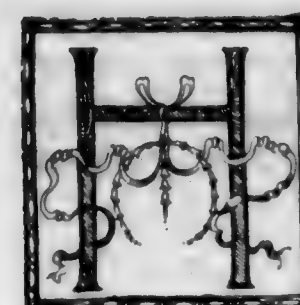
HIGH SCHOOL COMPETITION, FULLERTON, CAL.

SATURDAY, April 9th at 1:30 P. M., the Fullerton High School Board will consider plans and specifications for a High School Building. For particulars address,

WILLIAM STARTRICK,

Clerk of Board, Fullerton, Cal.

BURNT WOOD IN DECORATION.



HE WHO has within him the divine fire of genius must perforce give expression to noble ideals: the medium employed, and the hand that wields it, are but servants of his inspired mind. In other words, a good draftsman can draw with anything. The decorations which have best withstood the ravages of time, and are the most chaste and refined, have been produced with the simplest means possible—chisel, mallet, and

marble; chisel and wood; modeling-tool, clay, and fire; sheet-metal and hammer. What could be more direct and simple than red-hot iron and wood?

Many years ago the manual labor of the artist in color was reduced to a minimum: he no longer grinds his colors, or makes his canvas and brushes. But up to the present day the artist in burnt wood has toiled on with his rude forge and burning-irons, with the devotion of an old-time alchemist. Singularly enough, relief from the discomforts of this crude mode of work has at last come through the avenue which brings relief from all physical ailments—that of medicine. The thermocautery, a surgical instrument invented for cauterizing, has been adapted to the use of the artist, so that he can work with comparative freedom.

The wood-carvings and wrought-metal work of the middle ages attract the lover of the picturesque by certain irregularities of line and angu-

larities of curve and plane, which do no injury to the whole, yet give it a character not found in the work of the rounded, sandpapered school of to-day. The tools of these masters were often crude, and many of these accidental accents were doubtless due to this fact. Yet these men expressed grand ideals, and their work as it stands to-day has an individuality which is largely due to this very picturesqueness. There are comparatively few workers in wood to-day who appreciate this quality, and only recently has really artistic wood-carving been done by American carvers. One of our most eminent architects, in speaking of the desire of his wood-carvers to destroy all character by the sandpapering process, says that it is necessary to stand over these men and to take

to take their work from them while they still consider it unfinished.

Burnt-wood decoration must be something more than a simple scorching or tinting of the wood: the same effect can be more easily produced with bitumen or Vandyke brown. Its value as a means of decoration lies in the wonderful character of its intaglio line-work and flat tones, and in the picturesque inequality of surface which the more or less vigorous burning produces. He who best knows the value of a line can best practice this art; but he who seeks to create modeled realisms can only degrade it. A rigid devotion to accentuated intaglio line work and to the laws of flat decoration must of necessity result in original effects unlike those produced by other mediums.

As of old the master wood-carvers and violin-makers hoarded flawless, dry wood, so must the wood-burner of to-day keep a vigilant eye upon the lumber-yards, and lay in a stock of flawless, dry wood. His material cannot be too well seasoned. It must be white, free from gum, and soft: white because contrasts are wanted, and free from resin that it may not turn black with age. As it is the fiber of the wood which is blackened or carbonized, not the resin, it is obvious that the freer the wood is from gummy substances the better. The most satisfactory fire-etching has been done on panels of French poplar, which is soft, white, close-grained, and free from gum. The common white wood or yellow poplar of America yields readily to treatment with the hot iron, and can be successfully used in conjunction with harder, rarer woods, as beneath the magic touch of the burning tool it becomes rich and solid. The harder woods are more difficult to work, but, by combining the natural grain of woods like maple or oak with the rich burnt tones, beautiful results may be obtained.

I know of a hall which is paneled from floor to ceiling with golden-hued Mexican mahogany upon which has been successfully burned a frieze of delicate Renaissance traceries. On the other hand, I know of a low-toned dining-room paneled in antique black oak, with a deeply burned frieze, add containing in the massive chimneypiece a historical decorative portrait, and in the four walls other similar portraits, all in burnt wood.

Every architect is willing to acknowledge that the utmost circumspection is necessary in applying any foreign material to architectural spaces. A glaring piece of mural painting, mosaic, or stained glass may destroy the artistic value of an interior, however purely and chastly conceived. It is obvious, therefore, that the very simplicity of the art of wood-burning, the unobtrusive quality of its color, and the utter impossibility of color discord, render it a safe and valuable means of interior decoration. Virtually it is closely allied to low-



DECORATIVE PANEL FOR CHEVAL MANTEL.



PANEL EXECUTED IN BURNT WOOD WORK.

relief ornament in wood, stone, leather, or metal, and is adaptable where these forms of decoration are used. Furthermore, its color-quality admits of its application in lieu of mural painting, tapestry, embossed leather, and tiles.

The commercial spirit of the age asks for decoration in large quantities, but it must be supplied cheaply; consequently the lover of truth and artistic originality is disgusted and disheartened at seeing the public accept and approve of mechanically produced decorations which are but base mockeries of nobler realities. The fire-etcher, after years of hard study in the furtherance of his art, awoke one morning to find that a clever Teuton had invented a machine with engraved metal cylinders, heated to a certain degree, which reeled off decorative burnt-wood panels *ad nauseam*. It would be useless to compare or contrast this class of burnt-wood work with that of the artist. We can more easily consign it to its proper category—that of the branded shovel-handle and cigar-box cover.

It would be impossible to state positively when this art was first practiced. Burnt panels have been found in various parts of Europe, set into ancient furniture, chimney-pieces, and wainscoting. In the museums of Europe there are marriage-chests, coffers, and panels, dating from the fifteenth century or thereabouts, upon which a species of low-relief woodwork, not unlike the so-called "fret-saw" work of to-day, has been applied or chiseled out, the flat surface being richly ornamented with fine traceries unmistakably burned with heated points. Some years ago a New York artist, while wandering through the sea-shore villages of Whales, found in a peasant's hut a rare panel of burnt-wood work of the Italian Renaissance (about the fifteenth century). The fisherman had found it on the beach, where it had drifted from some wreck. In the sacristy of the little octagonal church of Sant' Ercolano at Perugia are some ancient chests which were quaintly decorated with hot irons some four hundred years ago.

We are all familiar with the Japanese decoration of bamboo with the blowpipe, and any tourist to Switzerland or Germany can recall the rude scorching or tinting of the little carved souvenirs sold in the booths. These latter forms cannot, of course, be classed as manifestations of the art in question.

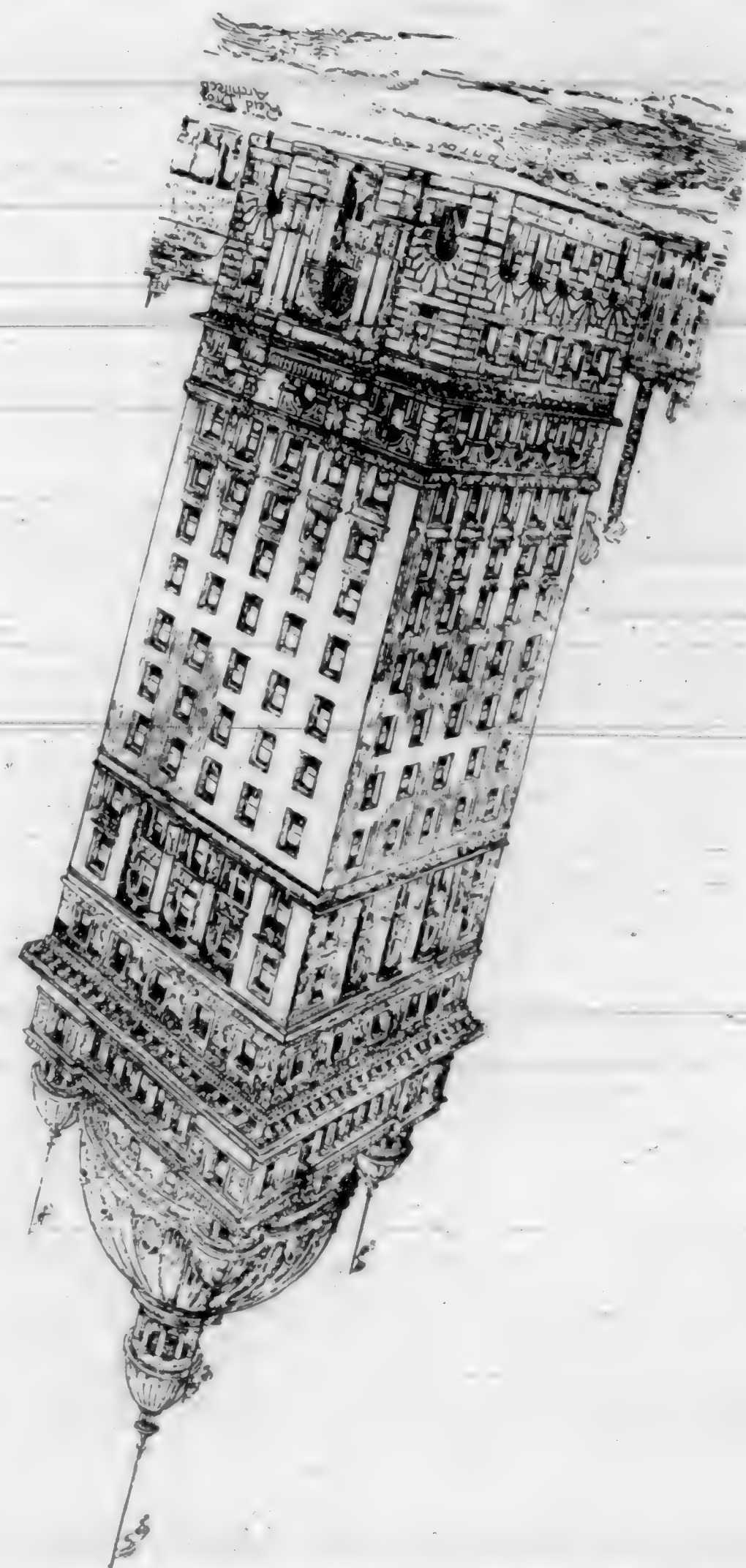
The art first made its appearance in this country nearly fifty years ago, when Ball Hughes, the English sculptor, residing in Dorchester, Massachusetts, became well known as a burner of "poker pictures." As copies of old English and Italian masters, they possessed merit, being executed with marvelous deftness. They were not decorative, nor were they intended to be such. Only recently has this medium been used in decoration, which is its only legitimate field.

Mr. H. C. Ives, art director of the Columbian Exposition, in his visits to all the capitals of Europe found but one interior completely decorated with burnt wood. It was the reception-room of the Stockholm Technological School of Art, which school, says Mr. Ives, is one of the best in the world. The apartment—a reception-room adjoining the director's office—was finished in every part by students. The mass of the woodwork was dark; the panels of doors, wainscot, and ceiling were all of satinwood, into which had been burned Renaissance designs. The decorations of the room, comprising stained glass, embossed leather, porcelain, etc., were all the work of students—"a rare pleasure," says Mr. Ives, "to see the true idea of art education thus practically carried out in the adornment of the school edifice itself."

The art of wood-burning may be easily abused. The igno-

rant may debase it by failing to recognize its proper sphere, but it will become an important factor in the furtherance of pure decoration so long as it is employed by the artist alone; for surely only the artist can give it that seriousness and strength without which it will be merely a passing fad.

J. WILLIAM FOSDICK.



THE *New Call* in its efforts to out do all the "yellow journal" sensations, has got itself turned completely over, and it looks to the "man up a tree" as if the task of righting itself would be found a hopeless one. A leak can sink the largest ship that sails the seas.

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CALIFORNIA ARCHITECT & BUILDING NEWS
SAN FRANCISCO.

BRITTON & REY, PHOTO-LITH.

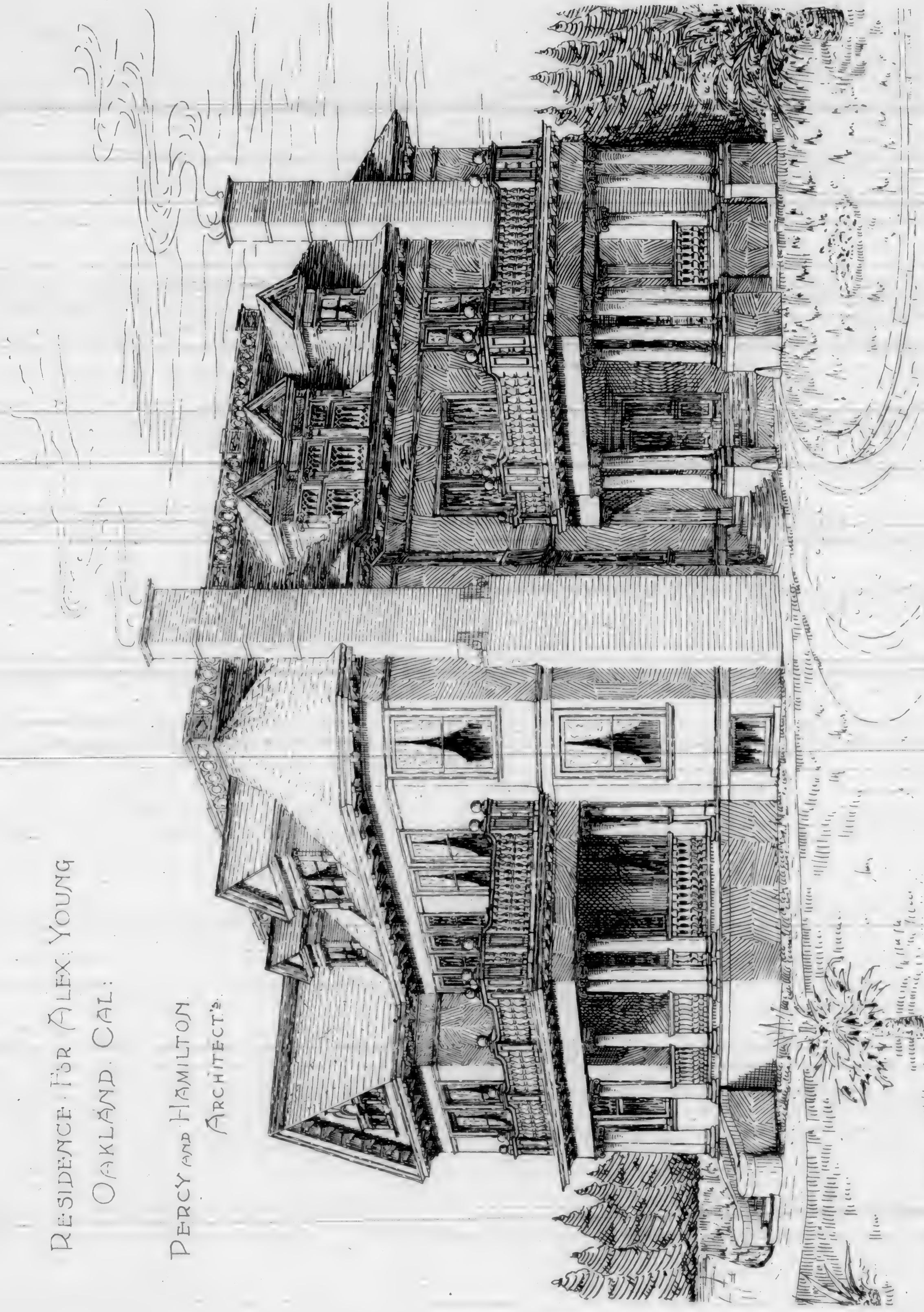
VOL. XIX No 3 MARCH 1898

WELLS FARGO AND CO'S EXPRESS BUILDING.
 SAN FRANCISCO, CALIFORNIA.
 PERCY AND HAMILTON ARCHITECTS.



RESIDENCE FOR ALEX. YOUNG
OAKLAND, CAL.

PERCY AND HAMILTON,
ARCHITECTS.



CALIFORNIA ARCHITECT & BUILDING NEWS
SAN FRANCISCO

BRITTON & REY, PHOTO LITH

VOL. XIX No 3 MARCH 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.

A PERSPECTIVE view is shown this month, in the double page engraving, of the new home now building for the Wells, Fargo & Co. Express, and of which Messrs. Percy & Hamilton are the architects.

A history of this Company's career would really be a history of the progress and development of the middle far Western States, the founding of the Company dating back to the Spring of 1852. Anticipating the regular mail service across the Continent the Company, in April 1860, established the famous Pony Express between St. Joseph, Mo., and Sacramento, Cal., making weekly trips and carrying letters only.

Since the beginning of its career Wells, Fargo & Company has gone on uninterruptedly, maintaining itself successfully, until to-day it literally spans the American Continent "From Ocean to Ocean," and reaches across the seas. It now operates on 27,472 miles of railroads, 2,343 miles of staging, 6,346 miles of ocean steamers and inland navigation; a grand total of 36,171. From 78 offices in 1857, it has increased to 2,829 and gives employment to 6,000 persons.

The new home of the Company will have a frontage of 160'6" on Second St. and on New Anthony St. with a frontage on Mission street of 112 feet and the north end fronts on a private street. It is to have six stories with basement and attic.

The main entrance will be in the centre of the Second street facade, and will lead the patrons through a finely tiled vestibule wainscoted with beautiful marbles, to the elevators, of which there will be two rapid running for passengers and one for freight.

The fronts on all four streets for first and second stories will be in Raymond Granite, the exterior walls above the second story will be in gray bricks and Terra Cotta. The building will be as near fire proof in its construction as it is possible to make it, and the floors and wainscoting throughout the corridors will be of finest California marble. It is almost needless to add that the building in every department will be finished in a first-class manner with all the latest improved appliances.

The basement, first, second and third stories will be devoted to the Express business, and the upper three stories divided off into offices for renting.

Richardson & Gale have the contract for the brick work.

Mr. R. Keatinge has the contract for the fire-proofing construction which is being done under the Ransome system.

The patent fire-proof ceilings and partitions used in this structure are furnished by the California Artistic Metal and Wire Co., San Francisco.

THE NEW CHURCH of the Holy Cross, of which our illustration is the accepted design, will be erected on the North side of Fddy street between Devisadero and Scott streets.

The Church will cover a lot, seventy-six feet front by one hundred and thirty-seven feet, six inches in depth.

It will be unique in character because of the fact that it will be the first Catholic church in the City of San Francisco, with the interior structural work of steel and the exterior entirely in stone. The total cost of the church will be \$50,000. The church will have a seating capacity of seven hundred and fifty, and the interior will be of such arrangement as will permit of a clear auditorium space, an uninterrupted view of the sanctuary from all portions. It will be ornamented in front with two stately towers of equal height, both running to a point 150 feet above the curb. The center will be emphasized or ornamented with a magnificent classic portico, supported by six lofty monolithic columns, 22 feet high and 2 feet in diameter, with ornate capitals. The portico is crowned with a grace pediment extending from tower to tower, drawing all parts into perfect union, creating a harmonious *tout ensemble*. The interior will be of elegant design and fine proportions. The sanctuary transepts and side altars being crowned by ornate arches 28 feet in width, connecting with an arched colonnade, which extends from the transepts to the entrance of the church. The entire interior will be lighted from above by windows placed in the clear story walls. There are no windows in side aisle walls, thereby affording the greatest amount of clear wall space for decoration in the future.

The Colusa Sand Stone Company have the contract for the stone work and Colusa sand stone will be used throughout the church.

A PERSPECTIVE view of residence, building for Alexander Young, Adams and Vernon streets, Oakland, Percy & Hamilton, Architects.

THE ELECTRICAL WIRING OF BUILDINGS.

IN THE *National Electrical Code*, the Rules and Requirements of the National Board of Fire Underwriters for the installation of wiring and apparatus for Electric light, heat and power, architects will find a safeguard that will protect them at every point, providing always that they post themselves sufficiently well with the rules and requirements that they may know on sight whether the contractor is complying with the specifications or not. It is not to be expected that architects will in their specifications enter into all the minute details for wiring, but it is to be very much to their credit when they specify "according to the rules and requirements"

of the National Board of Underwriters, and are in themselves sufficiently familiar with these rules to pass upon the contractor's work.

This solution of the difficulty is the only true one, and architects will find that the sooner such a course of procedure is put in force the sooner this vexed question will be satisfactorily settled.

Among the "GENERAL SUGGESTIONS" that are printed by the National Board, the following one for Architects is to the point:

"Architects are urged, when drawing plans and specifications, to make provision for the channeling and pocketing of buildings for electric light or power wires, and in specifications for electric gas lighting to require a two-wire circuit, whether the building is to be wired for electric lighting or not, so that no part of the gas fixtures or gas piping be allowed to be used for the gas-lighting circuit."

Had the Architect of the California Hotel specified, "according to the National Electrical Code," the Electrical Contractor's work there would have been of a very different order, and the fire that might have destroyed the premises been avoided. As it was, the wires were run across and so near the heavy iron gas mains beneath the old Kitchen floor, that the same old usual result happened—wires grounded on the iron gas mains and, of course, fire in the Kitchen floor. The only thing that saved the north wing of the Hotel from annihilation was a mere lucky incident—the Engineer's opportune appearance in the Kitchen.

To avoid these dangers to life and property is the clear duty of every Architect.



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

To the Editor of the California Architect and Building News.

GENTLEMEN:—I saw in your February issue an article in reference to fire-proof materials that were tested in the New Wells, Fargo & Co.'s building on Second street. However the test was made I do not know, but I can say that the people who made the test came to the conclusion that concrete material was fire-proof. I would like to ask for information, gentlemen, what the word fire-proof means. Does it mean something that will not light by the application of a match or something that will stand a limited amount of heat—say 1000 degrees Fahr. Now let me ask the gentlemen who were present at the test, how many degrees of heat were raised about the so called fire-proof material and if a stream of cold water was turned on it after it was heated up. Or how do these gentlemen account for the fact that concrete is fire-proof when the principal ingredients will not stand over and above 300 degrees Fahr. Is there any chemical action that takes place after the ingredients are mixed and the mass has set? If there is it is something very unnatural. The principal ingredient of concrete is rock—that is blue trap rock and Portland cement, which disintegrate

(after being mixed together forming with the addition of sand or gravel and water what is called concrete) when subjected to a heat of 300 degrees Fahr. In all big fires without exception it has been proven that the only materials that will stand fire without serious damage is burned clay, i. e., brick and terra cotta. It is now about four years since we had a fire that would bear me out in my argument. If people who observed the ruins of that fire near Fourth and Brannan streets about four years ago, and took particular notice, they would have seen all the concrete sidewalks destroyed in front of frame buildings, which had been burned down. The new St. Roses Church, then in course of construction, was damaged by the fire destroying the granite blocks and artificial stone or concrete trimmings, while not affecting the brick-work at all except drying it a little. The only thing that can be fire-proof is a material that has been already tested or burned. Now any kind of clay ware has to stand at least 1500 degrees of heat to be burned—while the genuine terra cotta fire-proofing has to stand about 3000 degrees Fahr. before it is marketable.

Hoping that my question may be answered, which is—What is fire-proof material? I remain,

Very truly yours,

W. A. BUTLER



MODERN APPLIANCES IN QUARRIES.

THE huge beds of stone upon which the two magnificent palaces of the Champs Elysees are to be erected, begin to make their appearance above ground. These two buildings will border the "Grande Perspective Nicolas II." at the Universal Exhibition of 1900. How will it be possible to construct so speedily these imposing monuments destined to remain after the exhibition among the architectural beauties of Paris? We can readily understand how the architects, men of undoubted talent tested by numerous competitions, to whom the work was entrusted, imagined, studied and planned these palaces with marvellous rapidity; but the materials themselves, the stones which form the bulk of the work, how can they be obtained in time, drawn in huge blocks from the quarries? Here is a very interesting object lesson, in which is revealed the power given to human labor by mechanics with its admirable utilization of forces. It is by the cutting, transport and piling of huge blocks that the successive stages of civilization have marked the extent of their grandeur. Are not the obelisks and pyramids a cause of admiration and wonder even to people of the present day? How was it possible for pure manual labor, even when carefully distributed, disciplined, subjugated, to hew those gigantic stones and then move them into their final resting-place? Important works have been written on the subject, from which it appears that the inclined plane and the wedge

no less than patience and length of time contributed to remove these difficulties. But fundamental documents are too frequently denied to seekers; perhaps they were lost, to our deep regret, in the famous and silly destruction by fire of the famous Library of Alexandria. The present generation has consequently been obliged to begin all over again. Very fortunately, steam and electricity have given it perfectly new means of action of such power as to be able to rival the buried secrets of ancient engineers.

A striking example is furnished in the working of quarries where electricity, now co-operating with the steam, wins victories of power of great value. Work must be smart in the cutting of a bed of stone in quarries. The architect who has ordered the ashlar and arch-stones is always in a remarkable hurry. Besides, one has to work in the open air, amid the dust in fine weather and under the pelting rain in bad. The steam engines scattered about the quarry were often injured by such a state of things; they became clogged, suffering from a kind of engine rheumatism, afflicted by untimely condensations, a kind of pulmonary apoplexy, and uttering heart-rending groans, not, however, stone-rending.

With this plant electric conductors all these inconveniences vanish in many cases. In the great quarries of Euville, for example, for the work of extraction, the machines which cut the stones are electric, the work-yards are lighted by electricity, and water is raised by this same means to a height of 60 metres to feed the boiler of the little steam motor which is situated at the end of the big rolling bridge and raises the stones through space. From an already long experiment it is estimated that a great final saving is thus obtained.

In the quarries of Hainault, also famous, there is a rolling bridge of 60 metric tons power which raises the biggest blocks. It is worked by steam, but illuminated by electricity, and served continuously by pumps, windlasses and electric cranes. The annual production of a quarry exploited in this way is estimated at 20,000 cubic metres of granite. We may also mention the instructive case of the Soignies quarries. When boilers and special motors were employed for the various machines situated in different parts of the work-yards which are about 52 hectares in area, the consumption of coal was 4 to 5 kilogramme per effective horse-power. Since adoption of electricity the consumption of coal fell below one kilogramme per horse. It is a result not to be despised, and which demonstrates the utility of classing motive power. Let us add that, thanks to these powerful electric machines, the time requisite for extraction of stones and their employment has thus been greatly reduced. To build a big monument, palace or imposing edifice of any kind we had formerly to reckon on long delay in extraction, without mentioning the time required to dry the stone and render it frost-proof. The time of drying is about the same with the new rapid methods of extraction; but circumstances change. It is quite a different affair to dry a stone which for months has been subjected to the inclemency of the weather and that which is removed and placed under shelter in a few days.

It is to this powerful and improved extracting plant that the Exhibition of 1900, being now prepared on a scale of incomparable grandeur, will be indebted for the sudden appearance of its palaces above ground, recalling to mind the mythological legend of Orpheus charming the animals, rocks, trees; etc.

In fact, we here find a reply to the question made by

Henri Heine: "Had not nature formerly a sensibility similar to that of man and perhaps more? The inspiring power of Orpheus, we are told, led away trees and rocks in a dance. Is such a prodigy possible at the present day?" If Henri Heine were conducted by one of the architects of our future Exhibition through the yards where the marvelous work is being executed he would no doubt exclaim, all poetical skepticism conquered, "The prodigy has happened."—*La vie Scientifique*.

THE CALIFORNIA UNIVERSITY COMPETITION.

AS OUR BRETHERN ACROSS THE WATER VIEW IT.



THE ARRANGEMENTS for this proposed great international competition have now assumed a definite form. The programme and conditions are comprised in a pamphlet of nearly forty pages, issued by the

The Trustees of the Phebe Hearst Architectural Plan, 217 Sansome street, San Francisco, but of which copies, we believe, can be seen or obtained at the Institute of Architects. It may be useful, however, to notice here some of the main points of the programme.

The competition is for a general scheme for the whole laying out of the ground and arrangement of the buildings, "the guiding thought of the entire undertaking," so that, although the whole cannot be carried out at once, those buildings which are erected from time to time may all be carried out as portions of one great design. The competition will be a double one, Preliminary and Final; the final competition, as usual in such cases, being between a limited number of competitors selected from the preliminary competition. It appears, however, that even the preliminary competition will be a matter of considerable detail, as the "general plan" will indicate all the buildings in detail, and not in block only, to a scale of 100 ft. to the inch. The other drawings will be a general elevation and a general section, to the same scale as the plan. The authors will each use his own judgment as to which points of the design he will take for his section and elevation; and as each competitor is to be allowed full liberty to arrange the buildings and sites as he thinks best, it would be difficult to specify any special line for the section or elevation.

The jury will select not less than ten plans from the preliminary designs, but have power to select more. If only ten are retained, their authors will each be entitled to a premium of 300l.; if more than ten and not more than fifteen are selected, the premium will be 240l. each; if more than fifteen are selected, 200l. each. This arrangement seems rather illogical, from the point of view of the architects, as one cannot see why any one man should receive less for his labour on account of the proportion of merit in the other competitors; and as there seems to be plenty of money, we should suggest that it would be much more fair and logical to give the same premium to all those whose works are selected for the final competition, independently of their number. The premiums are not, however, to be paid at once; one third of the sum is to be paid down, and the remainder after the competitor has sent in drawings for the final competition. This is, however, independent of the premiums specially attached to the final competition, for which

a sum of 5,000^l. has been set aside; of this at least 1,600^l.^{*} will be awarded to the plan classed as No. 1, and at least five of the final competitors will receive premiums; but the jury retain the right of distributing the total allotment among a greater number of competitors if they think fit.

In the final competition a general plan, section, and elevation are again required, accompanied by a general perspective view, all the three latter, as before, to be taken at any point the competitor prefers. What further drawings may be required will be decided by the jury after the preliminary competition; they may require the competitors to give drawings of one division or set of buildings; to a larger scale, we presume, than that of the general plan, though that is not stated in so many words. We observe also that no statement is made as to the scale to which the general drawings are to be made for the final competition; as far as appears, they are to be the same as in the first competition; but the fact that the scale is not defined appears to be an oversight. The point is of some importance as an indication of the amount of work a selected competitor will have to go through before his chance of ultimate success in the final competition. If the scale for the general plans is to be the same, there does not appear to be any reason why a competitor might not send in his general plans again for the final competition, if he is entirely satisfied with them. In connection with this point, however, it may be mentioned that a competitor selected in the preliminary competition has full liberty to modify his designs for the final one, and is not obliged to adhere to his first scheme. All descriptive writing on the plans is to be on the rooms described and not in the margin (a provision, obviously, against the possible waste of time of the jury in referring to schedules and reference letters), and it is all to be in English; no other language will be recognised. For a competition open to all the continental countries we should have thought French would have been more convenient.

The preliminary competition is to be decided by a jury of architects, viz: Mr. Norman Shaw, R.A. (London), M. Pascal (Paris), Professor Wallot (Dresden), Mr. Walter Cook (New York), and Mr. J. B. Reinstein (San Francisco). We are rather surprised that the committee did not apply to Mr. Waterhouse to be the English representative on the jury; in that particular function his name, we should imagine, would command more confidence with English competitors (if there are any) than that of any other English architect, more especially as this is a case in which plan is of the highest and most essential importance, and Mr. Waterhouse is a master of plan. For the final competition the jury will be composed of the five members of the preliminary jury, and of four architects who will be chosen by the Phebe Hearst Trustees, assisted by lists of names proposed by the competitors who are selected in the preliminary competition, each of whom will be invited to send five suggested names, the four who have most votes to be selected, subject, however, to proper provision for the international character of the jury.

The preliminary designs are to be delivered, not in San Francisco, but to the care of the United States Consul at Antwerp, by July 1 of this year. No date is yet fixed for the conclusion of the final competition, but it is stated that the selected architects will have not less than six months given them to mature their designs; and they will moreover, if they wish to study the site, receive, under certain conditions, first class transportation and expenses for the journey from their places of residence to San Francisco and return; a provision both liberal and sensible. There is to be no exhibition of the general collection of preliminary plans, but after the final competition the final and preliminary plans of all those who take part in it will be exhibited at the Mark Hopkins Institute of Art at San Francisco.

The programme has been deposited at various centres in different cities, that for London being the Institute of Architects.

Such is the outline of the arrangements for this very exceptional and perhaps unprecedented architectural competi-

^{*} In the programme the sums are given, naturally, in dollars; we give them here in English currency.

tion, concerning which it is difficult to predict whether it is likely to result in a grand success or a *fiasco*. The ultimate prize, for the man who comes out the winner in the final competition, is no doubt a grand one; but the work to be done for even the preliminary competition is so serious that it may be questioned whether many architects who are already in possession of a fair practice will care to go through it for the chance of selection to enter the final competition; for the premiums in the preliminary competition, though they may be thought liberal in comparison with ordinary competition standards, will by no means recompense the work to be undertaken. This will be realised at once when we say that the general plan includes no less than twenty-eight blocks of building, many of which must be extensive and elaborate in plan, and the plans of all of which must be given in as much detail as can be shown on the scale of 100 feet to an inch. The following is the list of these Departments, the requirements of which are in some cases drawn out at considerable length; we must content ourselves here with merely indicating the principal rooms required in some of the more important blocks:—

1. Administration: Including entrance to the University, offices of the president and secretaries, and for the meetings of regents and professors, reception-rooms, ante-rooms, committee-rooms, hall of records, etc.
2. University Library: For 750,000 volumes, with large reading-room, hall for papers and periodicals, study-rooms, etc.
3. University Museum: Provision for art, antiquities, ethnology, etc.
4. Auditoriums: Two, each adapted to lecture, concert, and theatre purposes, 5,000 and 3,100 respectively, and a garden arranged for celebrations and receptions.
5. Military Establishment: Four lecture-rooms, library, museum, gallery of models and drawings of military works, armoury, drill field, etc.
6. Gymnasiums: Two large halls for exercises, each with 200 dressing-rooms, and 100 shower baths; two swimming tanks, large field for athletic games, with stands and seats, "treated in a monumental and majestic style."
7. Printing and publishing Establishment.
8. Habitation: for 3,000 students, and for head of the Material Department and family, assistant doctor, superintendents—employees and workmen, etc., and two dining establishments for students.
9. Club Houses: Four, with all modern appointments.
10. Infirmary.
11. Approach and Communication: Porticos, galleries or corridors, interior staircases, elevators, etc.; covered communications between the various groups.
12. Buildings for the General Service: A central plant for production of power, heat, and light; workshops; telegraph and telephone stations; warehouses; fire department station, etc., etc.
13. The Departments of Instruction in general: Various adjuncts required in all the groups—cloak-rooms, lavatories, department libraries, study-rooms, etc.
14. Department of Philosophy and Pedagogy: Eleven lecture-rooms, twelve laboratories, etc.
15. Department of Jurisprudence: Eleven lecture-rooms, etc.
16. Department of History and Political Science: Fourteen lecture-rooms, gallery of geographical maps, etc.
17. Department of Ancient and Modern Languages: Fifty-four lecture-rooms.
18. Department of Mathematic: Fifteen lecture-rooms and model-room.
19. Department of Physics: Ten lecture-rooms, thirty-one laboratories, with necessary adjuncts, tower for vertical experiments, long gallery for optical experiments, machine-shop, etc., etc.
20. Department of Astronomy: Observatories for astronomy and meteorology, six lecture-rooms, dwellings for three astronomers and families.
21. Department of Chemistry: Three lecture-rooms, thirty-one laboratories, and a long list of accessory departments.
22. Department of Natural History: Ten lecture-rooms, various laboratories and their accessories, dissecting-rooms, vivisection-rooms, large museum of zoological collections in three sections, microscopical laboratories, herbarium, botanical garden, etc.
23. Department of Fine Arts: Providing everything for the teaching of the Fine Arts; painting, sculpture, architecture, music; etc.
24. Department of Agriculture: Seven lecture-rooms, many laboratories; museum for agricultural products, etc.
25. Department of Mechanical Engineering: This department includes electrical engineering. Eight lecture-rooms; eighteen laboratories; five drawing-rooms; three or four workshops, rooms for collections and models, etc.
26. Department of Civil Engineering: Accommodation similar to last department.
27. Department of Mining: Similar to No. 25; space and accommodations required for this department are about the same as

for the Department of Mechanical Engineering; power supplied from central station.

28. Department of Draughting and Graphical Analysis: Nine drawing-rooms, model-rooms, etc.

Bearing in mind that in the above statement of the requirements for the various blocks we have only given the principal items, and omitted a great quantity of minor detail, it will readily be seen, that this is a scheme which no man can adequately consider and sketch out plans for, even on the small scale demanded, between now and July 1, unless he put aside everything else that he was doing and devoted his whole time and thought to this one competition; and is it likely that any man who has a practice and has his living to make by it will abandon all his regular work for the sake of the chances offered to him here? The only people who are likely to go in for it are ambitious young men who have not got into practice, and who have enough to live on to support them while they are engaged in working out the California scheme; so, at least, the probability appears to us; and we do not suppose it was that class of architect which the promoters desired to attract. The promoters, in fact, seem to have been a little bitten with that disease of *megalomania* which is said by Nordau to be a special weakness of the present day; they have desired to have an architectural competition on such a scale as should throw all others into the shade; and they have gone beyond the limits of what it is possible to expect from competitors. They should have asked for a block plan of the site, with a sketch elevation and section, and detailed plans of perhaps two of the blocks, as an indication of the author's efficiency in the details of planning. With such a programme they might have attracted some of the most eminent architects from all countries. As it is, we very much doubt whether they will attract any such men. There may be still time to consider the matter and to announce such a modification of the conditions as we have suggested, through the Press, in such a manner that it should come under the eye of all actual or possible competitors; and the Trustees or their professional advisers would probably do well to take this point into consideration before it is too late, if they wish the competition to be a success. *The Builder, London.*

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.

CONTINUED FROM LAST ISSUE.



IN VIEW of these important developments, it is our opinion that important structures of this class should have a radically different method of fireproofing. The fireproofing should be in itself strong and able to resist severe shocks, and should if possible, be able to prevent the expansion of the steel work.

There seems to be but one material that is now known that could be utilized to accomplish these results and that is, first-class concrete. The fire resisting qualities of properly made concrete have been amply proven to be equal if not better than fire clay tile, as shown by the series of tests carried on by the Building Department of the City of New York.

The Engineering Record of September 16, 1897, states that in the Denver test a floor made of end construction porous terra cotta endured eleven alternate applications of

fierce flame and cold water, lasting 23 hours and finally endured a 24 hours continuous fire test and afterwards sustained a load of 12,500 lbs. which seems quite satisfactory still, personally, all things considered, I would give the preference to concrete.

From the experience gained in street railway construction in laying continuous rails, it is to a large degree possible to prevent the metal from expanding. In street railway work this has been accomplished merely by the adhesion of the pavement to the side of the rails. In building construction the same results could be obtained by encasing the columns and girders with concrete placed directly against the steel work. The adhesion of the concrete would to a large degree prevent unequal expansion of the concrete and steel. The floor arches should also be constructed of concrete but of sufficient depth to be able to resist lateral forces, except during a fire principally wind pressure. By the use of such floors with the prevention of injurious expansion and the protection of columns with materials that can stand severe shocks of any nature whatever the modern steel frame constructed building would be most thoroughly protected against any fire.

The construction herein suggested should not materially increase the cost of construction. The solid concrete about the columns would be added strength to same, and could no doubt be made self supporting. The same could be said of concrete surrounding beams and girders, as has been amply demonstrated by the strength developed by concrete iron constructions.

As so-called fireproof buildings are not equally and to the same degree, protected against fire, we would recommend to the insurance companies that they should vary the rate of insurance for this class of buildings, depending upon the character of the fireproofing used. The competition between fireproofing companies has been so severe as to reduce the price of their output, in very many instances at the expense of quality. The large fire loss in the Home building would still have been larger had the fireproofing been of poor quality, and we would further recommend that the insurance companies have prepared standard specifications governing the character of the fireproofing and the construction and putting up of same, and requiring owners of buildings to use fireproofing subject to these specifications, under careful inspection, or be subjected to higher insurance rates.

Before answering the question—"What is the best fireproof construction"—I will call your attention to another class of buildings known as "Mill Construction" much in vogue, particularly in St. Louis. The Chicago building ordinance permits building of this class to be 100 ft. in height as against 60 ft. for common construction. The underwriters give them an advantage of rate indicating a less hazardous risk. Are these advantages justified by the facts? I think not. Mill construction as understood by the Chicago Building Department is thus described in the city ordinances—"The term 'Mill Construction' shall apply to all buildings in which all the girders and joists supporting floors and roof have a sectional area of not less than 72 square inches, and above the joists of which there is laid a solid timber floor of thickness not less than 3 3/4 inches thick. Wooden posts used in buildings of this class shall not be of smaller sectional area than 100 sq. inches. Partitions and elevator enclosures in buildings of this class shall be made entirely of incombustible material. If iron pillars, girders or beams are used in building of this class, they shall be protected as provided for fireproof building; but the wooden posts, girders,

and joists, need not be protected by fireproof covering. The use of wood furring wood laths or steel partitions, shall not be permitted in buildings of this class."

On the 15th of March last there occurred a big fire in the heart of the wholesale district in St. Louis, a building occupied by the Ely-Walker Drygoods Co. Quoting from the St. Louis Democrat of the 16th of March, "the loss will be close on to \$1,500,000.00. One human life was lost and several people hurt. The fire was one of the worst the St. Louis fire department has had to cope with for a long time and for a time it looked as though there was to be a conflagration that would wipe out the Washington avenue wholesale district. The firm's enormous stock had been recently increased by large purchases of the finest lines of goods in the market, consequently every inch of available floor space was occupied by great piles of dry goods of every description for the spring trade." Desiring to obtain reliable information in regard to the character of the building burned I wrote to W. S. Eames, of Eames & Young, architects. Mr. Eames replied immediately as follows:

In regard to the recent destructive fire in our city, I beg to send you under separate cover two newspapers which contain very graphic and accurate descriptions of the fire, the amount of damage, the character of the contents of the building, etc. The fire began about half past seven on Monday night, and while I am dictating this letter I can see from my window the engines still attempting to quench it. Portions of all the walls remain, but the building is a total loss unless it be the foundation and the walls of the first and second stories. The building was not a fireproof building in any sense. It is what is known by the St. Louis Board of Fire Underwriters as "a standard slow combustion building." I enclose a printed specification for such buildings as issued by our Board of Underwriters. The building in question complied with all of the requirements of this specification except as to area and height. The building is about 120 ft. square and seven stories in height. It had three street fronts and a blind wall on the other enclosing side. The two principal street fronts were faced with Long Meadow brown sand stone. It was one of the last works of the late H. H. Richardson, and was of course Romanesque in style. Of course the stone work of the two street fronts was principally Ashlar backed with brick work. The building was constructed by Norcross Bros., of Boston. The basement, first and second stories, I think, had cast iron columns enveloped in fire clay casings plastered. The remaining columns were of southern yellow pine. The wooden girders, wooden floor beams and heavy planking were of Long Leaf Mississippi or Louisiana pine. The building was not equipped with automatic sprinklers and to this defect is attributed the loss of the building and its contents. The stairways and elevators were enclosed in brick shafts with standard metal covered doors to all openings.

The fire burned for about three hours apparently entirely within the building. Then came a collapse (which probably was caused by the fall of the burned wooden posts) whereupon the fifth, sixth, and seventh floors and the roof fell in and created an opportunity for a tremendous conflagration. The enormous mass of heavy dry seasoned beams and flooring made an irresistible fire with a heat of great intensity. The first, second and third floors are still in position but of course the intense heat has damaged what remains of the walls, and the contents of the building are a total and irreparable loss.

Most of the commercial mercantile building in this city have for the past seven or eight years been constructed upon

the slow combustion principle. The reason being that the Board of Underwriters gives a rate on such construction that makes it profitable to the owner of the building as well as the occupant. Nearly all of the buildings in the Cupples Block, of which we were the architects, are buildings of this type of construction. But special constructive features have been added to the requirements of the underwriters and the entire plant is thoroughly equipped with the very best system of automatic sprinklers."

The specifications of the St. Louis Board of Fire Underwriters for mill construction, although more in detail, do not differ materially from the Chicago city ordinances, which were quoted. In these buildings there is no lath and no plaster, hence, no covered passages, so that the fire is entirely exposed to the direct action of the fire department. This is certainly an advantage at the outset of a fire. It also enables the fire department, after the fire is well under control, to extinguish it entirely. There is no opportunity for the fire partially extinguished to be hidden under lath and plaster and to break out later. To this extent the system is advantageous but under the conditions under which the Horne building was placed—the raging fire across the street to windward, inflaming the goods in every store at the same instant—mill construction feeds the flame and causes total loss in an incredibly short time. Several Boston fires, the Jenkins building at Pittsburgh, as well as the St. Louis fire, have shown that no advantage as against loss can be expected from this class of construction. The timbers add so much fuel to the flames after the fire is once under way. In these buildings we meet another difficulty. The long heavy timbers required for that construction can be obtained cheapest and easiest in southern or pitch pine. Moreover, this material is usually considered to carry a heavier load than oak. For example, a 10 in. x 10 in. post in Georgia pine would require by formula in general use to be 11 in. x 11 in. if in oak. Oak is much safer from fire but unfortunately cannot be obtained of the requisite dimensions and moreover costs about 50 per cent more per thousand, than southern or pitch pine, which can be obtained free from knots direct from the mills smooth dressed to the sizes demanded, hence, this is the material usually employed for such buildings. This southern pine, often called pitch pine, is as its name implies full of pitch. It is the most inflammable of all the usual building materials. The pitch distills out by heat and rapidly catches and spreads the fire with rapidity, so that the usual so-called "Slow Burning Construction" often used as a synonym for "Mill Construction" is a misnomer and offers no protection against the burning of a stock of goods beyond the ordinary common construction and is not entitled to any reduction in rate. Indeed, when pitch pine is used, I should be inclined to place this construction as extra hazardous as the building could be set on fire by the burning of a newspaper or by a gas jet flaming against the wood. Such a fire once started usually feeds itself and spreads rapidly over the entire building. I also object to the use of southern pine for the floors and interior finish of apartment houses as unnecessarily hazardous, for there is no doubt but what pitch pine helps along a fire and greatly increases the loss above what it would have been had oak been used instead of the pitch pine.

The Jenkins building at Pittsburg is reported by the Insurance World as of mill construction. Also the store in St. Louis occupied by the Ely-Walker Co., and many of the Boston buildings.

To be Continued.

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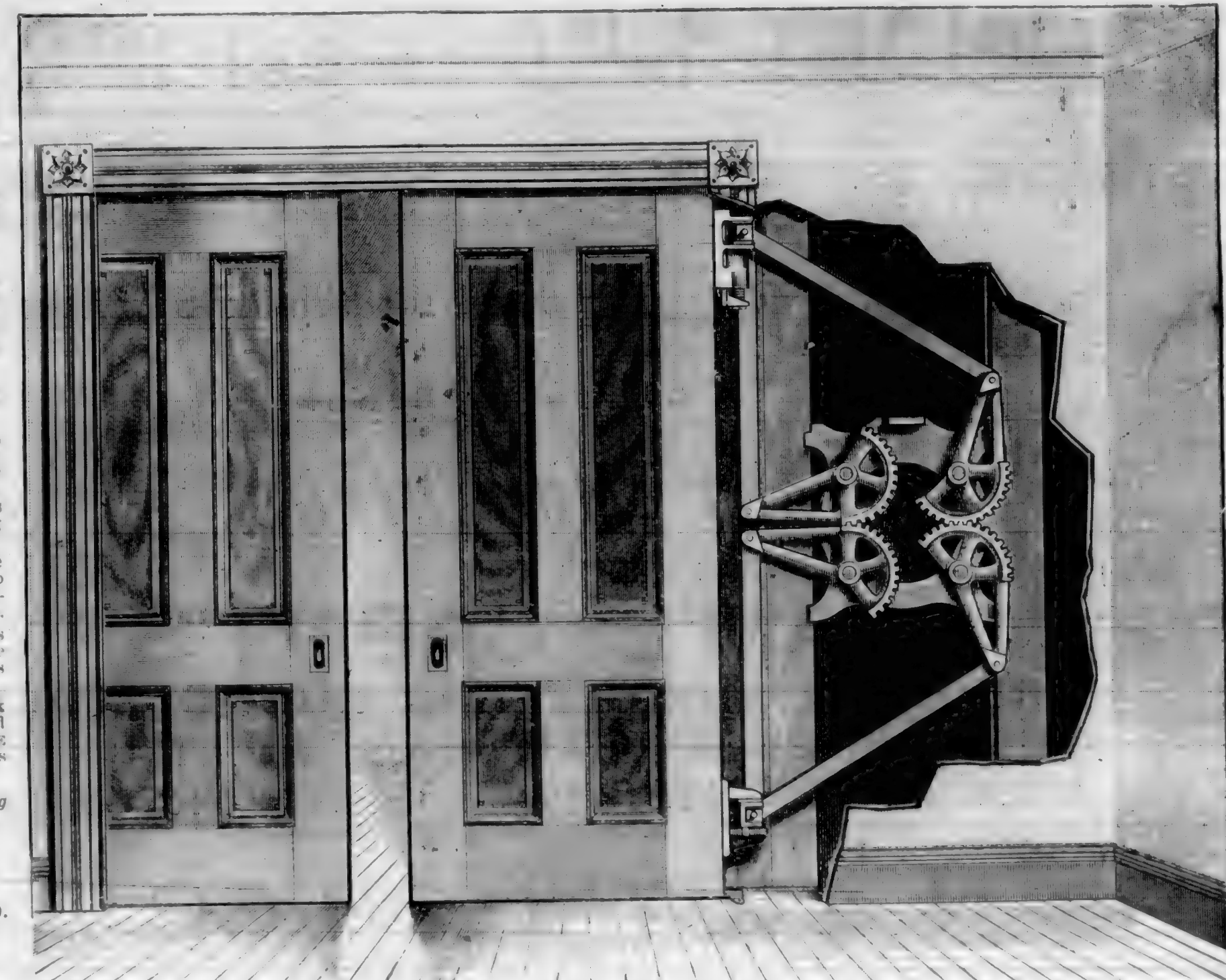
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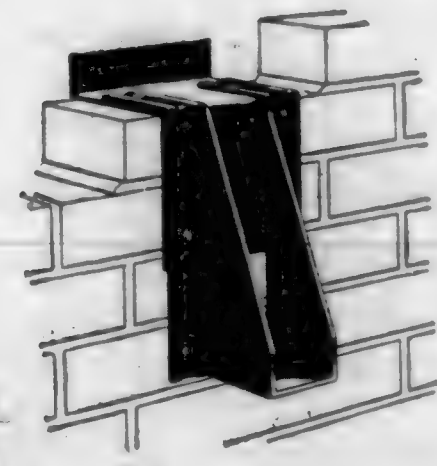
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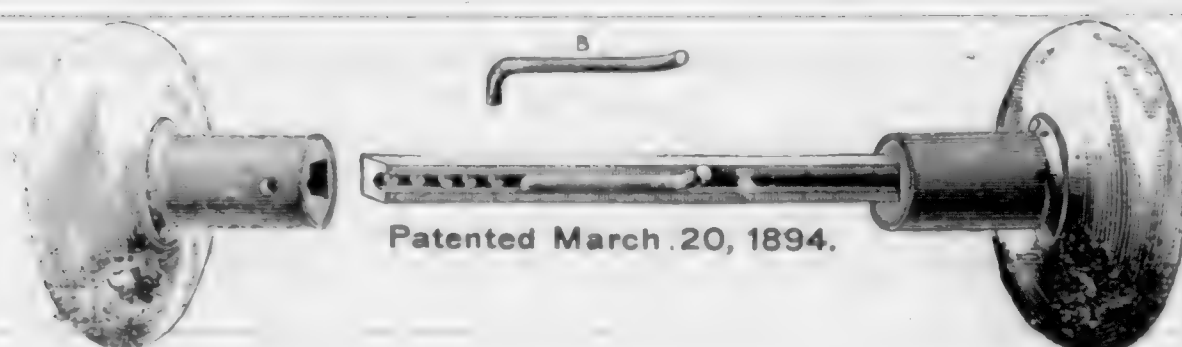
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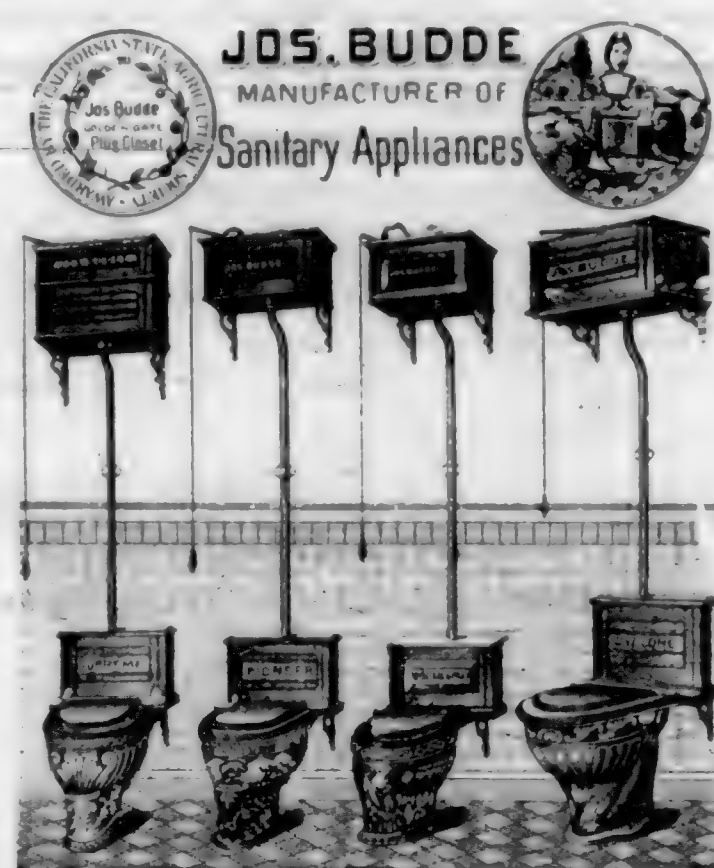
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THE CALIFORNIA ARCHITECT AND BUILDING NEWS

\$3.00 PER YEAR

VOLUME XIX, No. 4.

APRIL, 1898.

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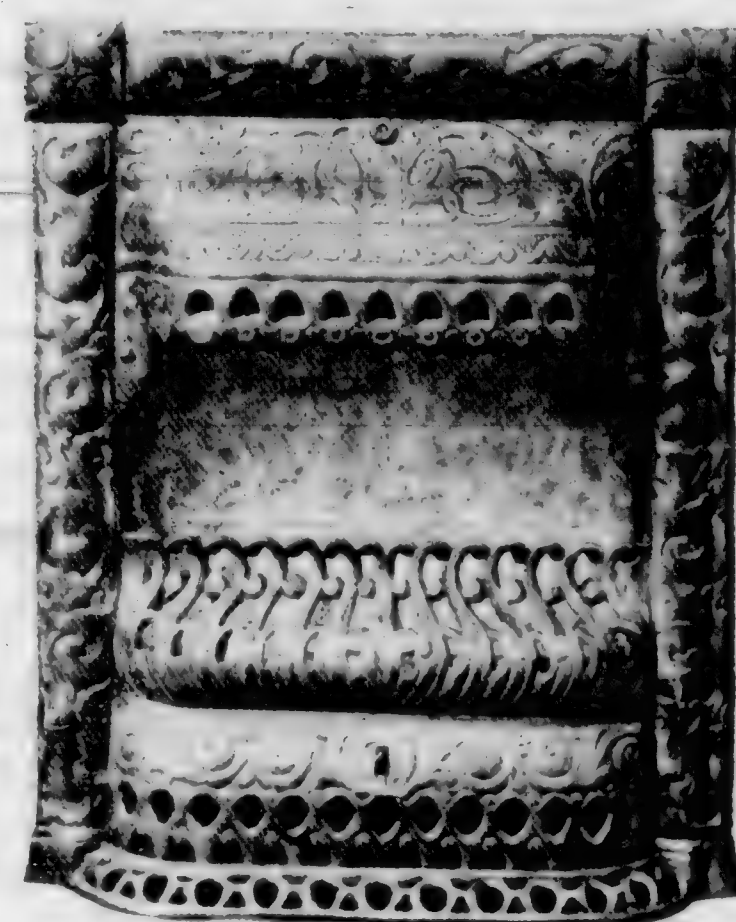
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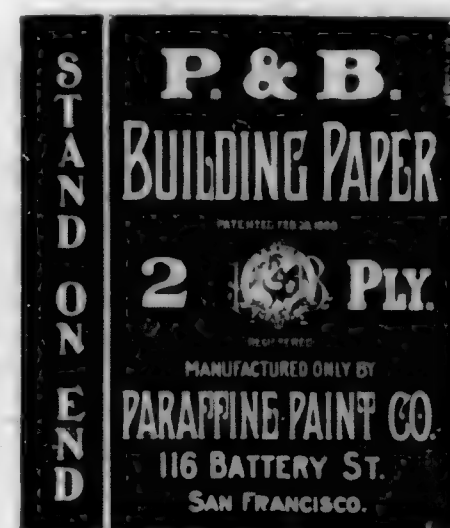
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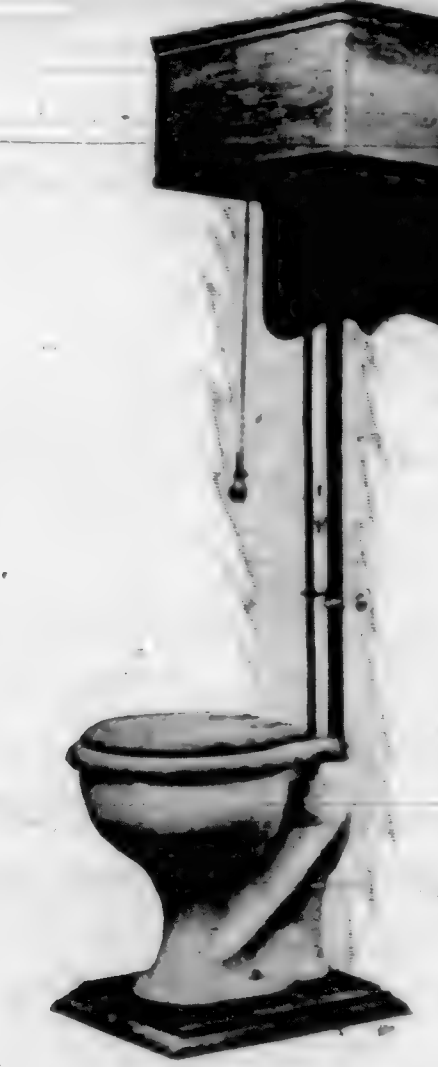
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SAN FRANCISCO, CAL.

BUILDING NEWS.

Broadway near Steiner. To build; o. Marie J. Radford; architect. G. K. Radford; c. Kidder & Cooper; signed, March 30; filed, March 31; cost \$1433.
Bush near Montgomery. All work except heating and ventilating for additions and alterations to six-story brick; owner, Pacific Telephone and Telegraph Co.; a. Albert, Sutton; c. Walker Bros. Co.; signed, March 28; filed, March 29; cost \$14,150. Iron and steel work; c. Walker Bros.; subc. Baisdon Iron Works; signed, March 28; filed, March 30; cost \$948.
Bush near Fillmore. Alterations and additions; o. George E. Schulz; c. Henry Behrens; cost \$100.

Bryant near Boardman Place. Alteration and additions; owner, Louis Randolph; a. H. D. Mitchell; c. A. N. Nelson; signed, March 30; filed, March 30; cost \$1600.

Buchanan near Geary. To build; owner, George Roth; a. Safford & Kohlberg; c. H. Behrens; signed, April 2; filed, April 7; cost \$7485.

Central Ave. near Jackson. To build; owner, Albert B. McKee; a. Albert I. Fain; c. Reil & Ahlgren; signed, April 7; filed, April 9; cost \$4700.

Crescent Ave. near Roscoe. To build; o. Edward T. and Lou L. Miller; c. Erick Bros.; signed, March 24; filed, April 2; cost \$1235.

Dolores and 18th. Three-story frame; o. Martin Gosselk; a. H. Geiffuss; c. W. Hornsmeier & Co.; signed, April 2; filed, April 4; cost \$1890.

Dupont and Filbert. Three-story frame; o. Rosa Demuth; a. W. Mosser & Son; c. Garcia & Pearnich; signed, April 7; filed, April 9; cost \$3200.

Ellis and Pierce. To build; o. Margaret O'Brien; a. W. F. O'Brien; c. T. B. Smith; signed and filed, March 28; cost \$1120.

Eleventh Ave. near M. Cottage; o. J. A. Jacobs; cost \$1000.

Felt near Lott. Three-story frame; o. Mrs. Elizabeth A. McDuff; a. Edward R. Swain; c. George R. Lange; signed and filed April 11; cost \$6100.

Ferry Depot. Shed over boilers and heating plant; o. Board of Harbor Commissioners; c. G. W. Campbell; cost \$2067.

Geary and Jones. To build; o. Ruby A. Root; a. C. A. Mousstetter; c. Frank Steinman; signed, March 18; filed, March 21; cost \$10,674.

BUILDING NEWS.

Gough and California. To build; o. Lewis Gierstle; a. Edgar A. Mathews; c. Edward Lietzer; signed, March 22; filed, March 24; cost \$28,075.

Grove and 32d. To build; o. John J. Hill; c. J. P. Beckett; signed, April 1; filed, April 2; cost \$1575.

Heron near 8th. To build; o. Margaret A. Mee; a. H. M. Woolley; c. D. W. Ross; signed, April 4; filed, April 6; cost \$200.

Hyde near Bay. Construction of a wharf; o. Equitable Gas Co.; c. Darby Laydon & Co.; signed, March 7; filed, March 19; cost \$880.

Hyde near Bay. Two gas holders and steel tanks; o. Equitable Gas Light Co.; a. Engineer of the Co.; c. H. Behrens; signed, April 9; filed, April 11; cost \$200.

Jackson near Polk. Excavations, etc.; o. Catherine Hoch; a. Jules Godard; c. Crawford Ferris; signed, March 18; filed, March 24; cost \$1050. Carpentry, mill and stair work, etc.; c. W. J. Field; signed, March 22; filed, March 24; cost \$1700.

Jessie near 14th. To build; o. Patrick Long; c. W. H. Hagger; cost \$200.

Jones near Filbert. Three-story frame; o. Mrs. Josephine V. Yest; c. E. W. Hyde; cost \$4400.

Kearny near Pine. Alterations and additions; o. Charlotte L. Gashwiler; a. J. T. Kidd; c. C. F. Shelby; signed and filed, March 24; cost \$1154.

Laguna and O'Farrell. Plumbing for three flats; o. L. Kutter; a. W. J. Cuthbertson; c. Eckelheimer; cost \$800. Painting; c. W. Shafer; cost \$400.

Market street, Nos. 937-943. Alterations; o. Claus Spreckels; c. T. T. Pottinger; cost \$1500.

Market near Sacramento. Grading, etc. for brick building; o. Emily F. Pope; a. Pissis & Moore; c. Jas. A. McMahon; signed, March 23; filed, March 24; cost \$11,085.

Market near 4th. Electric plant in Parrott building; o. Central Light and Power Co.; c. Union Iron Works; signed, April 5; filed, April 8; cost \$30,000.

Main and Folsom. All work for frame and iron building; o. Keystone Boiler Works; a. Percy & Hamilton; c. Anderson & Greig; signed, March 19; filed, March 21; cost \$7500.

BUILDING NEWS.

Mission near 18th. Repairs; o. Walter F. Foster; a. McDougall & Bros.; c. P. J. Brennan; signed, March 29; filed, March 30; cost \$1470.

Mission near 2d. Iron, steel work, etc.; o. Wells, Fargo & Co.; a. Percy & Hamilton; c. Joseph F. Forderer; signed, March 28; filed, March 28; cost \$12,624.

Oak near Laguna. To build; o. George J. Anderson; a. D. V. Dunt; c. Petersen & Persson; signed, April 2; filed, April 4; cost \$3180.

Railroad Ave. near Oak. Two-story frame; o. B. Vergez and A. Methebat; c. C. A. Henderlong; signed, April 4; filed, April 5; cost \$3800.

Second and Mission. Ornamental cast and wrought iron work; o. Wells, Fargo & Co.; a. Percy & Hamilton; c. Winslow Bros. & Co.; signed, March 19; filed, April 4; cost \$28,000.

Second near California. To build; o. Miss Mary McQuaid; c. John Keneally; signed, April 6; filed, April 7; cost \$2575.

Scott near Broadway. Two-story frame; o. W. F. Herrin; a. Julius E. Kraft; c. Anderson & Greig; signed, March 17; filed, March 29; cost \$673.

Stockton near Vallejo. Two-story frame; o. Hirsch Bros.; c. H. P. Conrady; signed and filed, April 6; cost \$4500.

Sutter near Taylor. Alterations and additions; o. Mrs. Mary A. Gaffney; a. Kenitzer & Barbi; c. Hannah Bros.; signed and filed, April 4; cost \$2,330.

OAKLAND

Sixth and Allee. To build; o. Henry Hennings; a. McNally & Slattery; c. A. H. Denke, Sr.; signed, March 23; filed, March 24; cost \$4380.

Adeline and 10th. Additions and alterations; o. M. Jones; a. Chas. Mau; c. McCracken & Lee; signed, and filed, March 8; cost \$210.

Tenth and Broadway. To build; o. John Lancaster; a. J. Conant; c. J. M. Shay; signed, March 30; filed, March 31; cost \$4157.

Butler Ave. near Idaho. To build; o. Wm. J. Elfert; a. John J. and T. D. Newsum; c. J. House; signed, April 7; filed, April 8; cost \$1800.

April, 1898.]

THE CALIFORNIA ARCHITECT AND BUILDING NEWS.

v

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BUILDING NEWS.

Forty near Grove. Two-story frame; o. Arch-Bishop of S. F. by Rev. Father L. Seda; a. Etienne A. Garin; c. P. G. McIntyre; signed, April 6; filed, April 7; cost \$255.

Fourteenth and Clay. Alterations and additions; o. First Methodist Episcopal Church; a. Samuel Newson; c. M. S. Libbey; cost \$500.

Ro El Valle de San Jose. To build Engine house; o. Pliebe A. Hearst; a. F. S. Van Treas; c. Charles and Walter Williams; signed and filed, April 12; cost \$4180.

Thirty-fifth near Telegraph Ave. To build; o. C. D. and Bessie Lither; c. Todd & Cornell; signed, April 7; filed, April 11; cost \$1520.

Union near 12th. Cottage; o. D. Knabbe; a. Chas. Mau; c. J. W. Baughman; signed, April 4; filed, April 12; cost \$1940.

Webster near Durant. To build; o. I. M. Condit; a. Geo. A. Bordwell; c. B. C. Allen; signed and filed, March 23; cost \$2500.

PIEDMONT

Club House. o. Piedmont Development Co.; a. D. F. Oliver; c. H. C. Canfield; signed and filed, March 21; cost \$2885.

ALAMEDA

Pacific Ave. near Chestnut. Brick and carpenter work; o. Thos. H. Kelly; c. Theo. Vectors; signed, April 2; filed, April 3; cost \$184670.

BOLINAS

To build. O. Bell C. and Grace Nichols; a. Oliver Everett; c. Edward Blotch; signed and filed, April 6; cost \$1344.

ROSS STATION

Dibble Tract, lot 10. Cottage and bath; o. Edward G. Seimdtell; a. Geo. H. Howard; c. Thos. O'Connor; signed and filed, April 7; cost \$3900.

SAN RAFAEL

B Street. Cottage; o. C. A. Burkhardt; a. B. A. Brown; c. Thos. O'Connor; signed, April 4; filed, April 6; cost \$1550.

By a decisive vote at a recent election here, it was decided to issue bonds to the extent of \$150,000 for the purpose of erecting a High School building.

SAUSALITO

On grounds of El Monte Hotel. To build one-story frame dancing pavilion; o. Excelsior Loan Association; a. B. A. Brown; c. J. Strittmatter; signed, April 5; filed, April 6; cost \$1550.

BERKELEY

Bancroft Way near College Ave. Two-story frame; o. Lloyd Tevis; a. A. S. Smith; c. Anderson & Stockholm; signed, March 28; filed, March 31; cost \$242550.

Humboldt Ave. and Prince street. To build; o. Walter Deakin; c. C. M. McGregor; signed, April 11; filed, April 12; cost \$104.

Telegraph Ave. near Durant Ave. Two-story frame; o. C. L. Tilden; a. T. H. Bishop; a. Edward B. Seely; c. Kiddier & Copper; signed, April 6; filed, April 7; cost \$7727.

BUILDING NEWS.

LOS ANGELES

Henry D. Thompson has purchased the southeast corner of Sixth and Bonnie Brae streets, and is having a plan prepared for a suitable residence.

H. B. Hubbard has purchased a lot on Alvarado street, between Tenth and Eleventh streets, upon which he intends erecting a two-story residence.

Architects **Ferris & Kromick** are preparing plans for James Christie, of a six-room cottage, to be built at Pico Heights.

Architects **Bradbeer and Russell** have prepared plans for Morris Klein of a six-room cottage, to be erected on Tenth and Union avenues.

Architect **R. B. Young**, has prepared plans and taken bids for a two-story frame building 36x36 feet, for the Pacific School of Osteopathy. The location may possibly be the corner of Tenth and Figueroa streets.

Architect **F. L. Roebig** has prepared plans for the Southern California Savings Bank, for extensive alterations to the southeast corner of Court and Spring streets, by which they will occupy when completed the entire ground floor of their bank building.

Architect **John P. Krumpholtz**, working on the detail drawings for the sugar house of the Oxnard beet sugar factory at Oxnard. Its dimensions are 400x120 feet; steel frame, expanded metal and fire-proof floor construction. The window frames, 30 in number, will be constructed of galvanized iron, and galvanized corrugated iron will be used for roofing. The steel frame work is well advanced, and work on the brick walls will commence shortly.

Architect **A. M. Edelman** has prepared plans for the estate of C. H. Heilman of a two-story business building 32x80 feet, to be built on the west side of Main street near Third street.

Architect **Edward Neisser** has let the contract for the erection of four flats, located on the east side of Olive street, between Tenth and Eleventh streets, to E. C. Shipley.

Architects **Bradbeer and Russell** have prepared plans for Mrs. E. Woolcott, for a five-room cottage to be built on Central avenue, between Seventh and Eighth streets.

Architect **H. F. Starbuck** is calling for bids for a church building to be erected on Third street by the congregation of the Knox Presbyterian church.

Architect **C. L. Strange** has prepared plans for a two-story 10-room residence, cobblestone foundation, natural wood inside finish; to be built on Burlington avenue.

Architects **Bradbeer and Russell** have prepared plans for a two-story frame for Dr. Jones, to be built on Olive between Second and Third. The same architects have plans for cottage to be built on West Ninth street.

Architect **Frank D. Hudson** has let the contract for the foundation work of a four-story and basement brick business building to be built on the east side of Broadway between Third and Fourth streets.

BUILDING NEWS.

Architects **Reid Bros.** 401-402 Stimson block have plans and specifications of the new Douglass building all ready for bidders. The building will be 5-stories and basement; the elevation will be either stone or pressed brick and terra cotta; steel columns and girders throughout; wood floor joists, forming a semi-fire-proof structure. Inside finish may possibly be oak.

Martin Bekins, the proprietor of the Van and Storage Co. is about to erect an addition to his brick warehouse at Fourth and Alameda streets, it will be 50x150 feet, and two-stories in height.

Architect **Krause and Jenkins** are preparing plans for Willard Sheldon of a two-story frame; concrete foundation, plastered outside, Spanish tile roof inside finish of oak redwood and yellow pine; to be built on the corner of Twenty-ninth and Menlo avenues.

Architect **A. Benton** has prepared plans for a new church for the St. John's Church, Episcopal of San Bernardino; it is to be of the perpendicular style with corner tower, side cloister; seating capacity 250; frame building; open timber roof; pine and redwood finish.

A Turkish hotel will be built on Grand avenue between 1st and 2d streets; cost \$10,000; architect, A. J. Kosby he is now preparing plans.

BAKERSFIELD

After taking off 30 feet from the proposed plans to this lot of house, Mr. Offer has awarded the contract of Geo. Robinson for \$110.

CATALINA ISLANDS

Architect **C. H. Brown** is preparing plans for the Catalina Yacht club, of a club house, to be built near the pavilion at Terminal Island, it will be 60x100, two stories, and surrounded by a porch 12 feet wide; the first floor will contain a ball room 35x58 feet.

SAN DIEGO

Building permits have been granted to W. R. Rogers for a residence at Seventh and Stevenson streets, to cost \$3500.

S. E. Cofes has been granted a permit to build a cottage at Third and Olive streets to cost \$1800.

The contract was awarded yesterday for the construction of M. V. Carroll's residence at Fifth street and Robinson avenue.

POMONA

Architect **R. B. Young** is preparing plans for the Sisters of the Holy Name, of a two-story frame academy building 65x100 feet, to be erected on the corner of Holt and Illinois avenues, Pomona.

RIVERSIDE

Frank A. Miller who intends erecting the new building which will be used jointly as a hotel and court-house, has asked for an extension of time to October 1st, pending the arrival of Walter Raymond from the east.

AUBURN

J. Ford has commenced a five-room cottage. J. Thon will build a three-room cottage on the Huntley tract.

Mrs. Champman is building a small cottage.

John Chisholm will build a five room cottage on Linden Heights.

Mrs. I. M. Power will build a small cottage for rent.

Contracts not let and no architects plans accepted for any of these.

GENERAL INDEX OF ADVERTISEMENTS.

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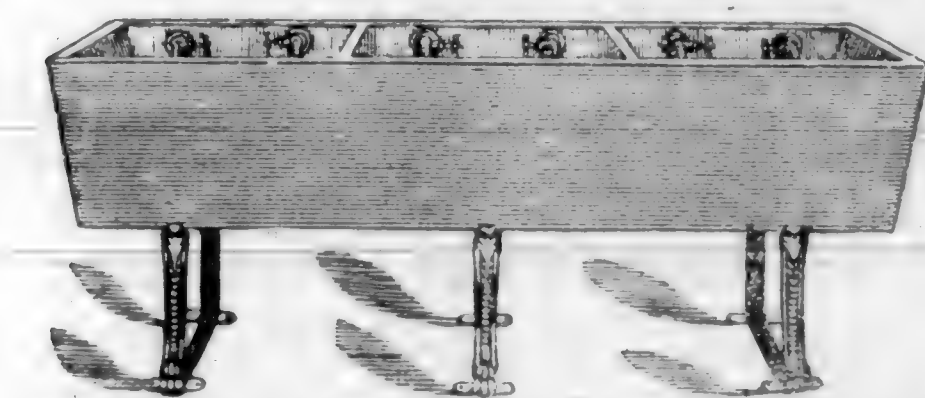
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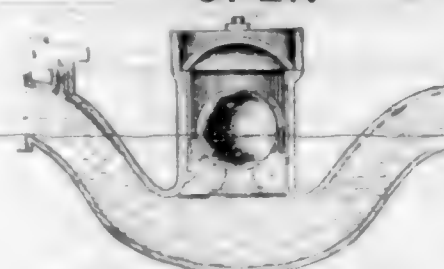
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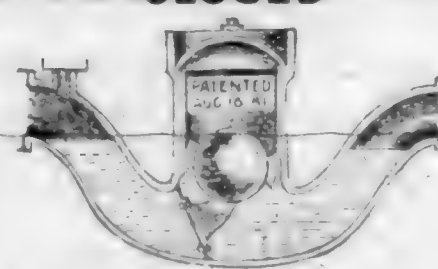
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THE
CALIFORNIA ARCHITECT
AND
BUILDING NEWS

ESTABLISHED IN 1879. NOW IN THE NINETEENTH YEAR. INCORPORATED 1889.

PUBLISHED ABOUT THE 20TH OF EACH MONTH
BY
E. H. BYRRELL LESSEE, PUBLISHER.
OFFICE 408 CALIFORNIA ST. SAN FRANCISCO, CAL.

13.00 PER YEAR.

VOLUME XIX.

APRIL 20th, 1898.

NUMBER 4.

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



IN THE Architects Code of Ethics is an article of very general adoption by the various chapters of America.

It reads about as follows:

Although employed and paid by the owner to protect his interests, the architect should remember that exact justice must be maintained between both parties to a contract. He should so conduct his practice as to maintain and foster a higher and better standard of construction; and to encourage the employment of a better class of skilled contractors and workmen in every department.

Another article of equal strength and general adoption in the Code says:

A number of the architectural profession is found to maintain its honor, and to labor earnestly to extend its sphere of usefulness.

These articles are perfectly right and proper but we feel it clearly within our province to point out the fact that in the matter of plumbing inspection a goodly number of the profession in this City have become sadly forgetful of the existence of the foregoing precepts in their Code of Ethics.

It has become almost a uniform practice to specify the grade of bathtubs, the quality of closet and brand of kitchen

sink, etc., etc., then finish the specifications by inserting this clause: "all other plumbing and drainage must comply with the rules and regulations of the Board of Health"—while we have no particular objection to offer to this mode of getting the plumbing contracts into municipal shape—we do most strenuously object, to the practice of requiring from the contracting plumber a Board of Health certificate of inspection as a condition to a contract. And our objection to this mode of procedure is fully sustained by the Ethics of the Code, wherein it says: "Exact justice must be maintained between both parties to a contract."

How can exact justice be maintained for the owner when an architect delegates to a plumbing inspector a duty that is clearly and specifically within the lines of his responsibility.

These inspectors are but human, and it is human to err, and we, who know their little peculiarities well, know that they were never known to err on the side of the owner.

These specifications, which read according to the rules, etc., etc., with the certificate of inspection clause as a condition to the contract, are to the plumber—who knows a thing or two about politics, and who has a friend at court—a source of considerable profit, as they are also to the inspector detailed on the building. But to the plumber who

figures on just what the rules and regulations call for, who is without a close political connection—as he is without the “useful friend at court”—that “certificate of inspection,” as a condition to the contract, becomes a bugaboo of insurmountable proportions.

Mark the result, the political plumber banking on his financial and political affiliations with the inspector—more particularly the former—and knowing the exact cost to his competitors for the work as specified, complacently sends in a bid below the actual cost of the work, which when completed is as complacently accepted by his friend the inspector.

Who suffers? The non-political plumber—an honest man as plumbers go—loses caste and business and the architects' confidence in his ability, through no fault of his own. The architect should suffer through loss to his self respect; the owner becomes a sufferer because of the trust he has reposed in the honor and Ethics of the profession supposed to be embodied in his particular architect, to whom he has also entrusted his property and his money.

It is to the architect and to the architect only, that the owner looks for protection; as an employer, the owner expects, and has every right to expect, that exact justice shall be maintained between himself and all parties to contracts entered into for him, by his architect. But this practice of deliberately delegating to an open-handed free-lance inspector, a duty which the Ethics of his profession and his honor as an architect demands shall be performed by himself, certainly cannot be construed by any stretch of the imagination, as obtaining exact justice for any one, nor of maintaining the honor of a profession that should be beyond all else honorable.

THE STEEL SKELETON IN HIGH OFFICE BUILDING CONSTRUCTION GIVEN ITS INITIAL EARTHQUAKE TEST.

THE Earthquake which arrived at 11:42:44 on the night of March 31, last, according to all authorities was by far the severest experienced in this city since 1868. Prof. Lenschner, Director of the Observatory at Berkeley, in reporting of its intensity says: “It must have vastly exceeded all prior shocks in a horizontal direction.” So of its severity there can be no doubt.

To be able to furnish to the world at large, and the building world in particular, the initial earthquake test of stability for the steel skeleton constructed high office buildings is now the proud lot of San Francisco.

It is, of course, only meet and just that where a condition of such vast importance as this arises, detailed reports of the effect of the shock upon the high buildings of the City, should be given to the world at large by the men who are responsible for their stability. Therefore the Editor of this Journal submits with much pleasure the following letters upon the subject:

To the Editor of the California Architect and Building News.

SAN FRANCISCO, April 22, 1898.

DEAR SIR—Your favor inquiring as to the noticeable effect of the recent earthquake on tall buildings of steel skeleton construction, is received.

In reply would say that the Claus Spreckels Building,

having a base of 70'0" x 75'0" and a height of 315 feet, i. e., having a height of four and one half times its base, has shown no signs of damage.

The closest inspection reveals no cracks, either in stone, mortar joints or plastering. No glass has been broken although some were bent plates of large size (72" x 132").

The elevator guides are perfectly true, showing complete recovery from any movement the building may have been subject to.

We have mentioned this building particularly, believing it offers the best proof of the complete immunity of well constructed buildings from damage, from our occasional seismic disturbances.

Other buildings, above the usual height, in relation to their bases, coming under our observation, show no evidence of harm.

Very sincerely yours,

REID BROS.

To the Editor of the California Architect and Building News.

SAN FRANCISCO, April 15, 1898.

DEAR SIR:—In regard to the last serious earth-quake and its results on high buildings which have been erected under my supervision, I beg leave to state, that having never been in favor of high buildings and never having constructed any buildings on the so-called steel or iron skeleton construction, I cannot give you any absolute information in regard to the effects of same. Have found no damage in any of the buildings which have been put up under my supervision further than slight cracks, especially where the wood partitions and brick walls are joined together, which condition of things have also found has occurred in all steel buildings.

In one building only, a ware-house having a front composed of a series of arches which were tied together by very rigid concrete and iron woven panels was there any effect which amounted to anything like a damage, and there so slight, as to be of no consequence. In this case it is very evident that the main building had undergone a decided movement from east to west, during this movement, where unquestionably the piers and walls were out of plumb, the rigid panels caused the brick work to crack on the face, but on cessation of the shock, all these walls and piers regained their original position, now being perfectly true and plumb, and the building as strong as ever, as far as can be seen by very close examination.

Having examined personally fifteen or twenty large brick buildings, including the Telephone Building, the Otis Building, the Grosvenor Hotel, and the building opposite the Grosvenor Hotel, I found no traces of any damage done.

Yours very truly,

WM. F. SMITH, Architect.

To the Editor of the California Architect and Building News.

SAN FRANCISCO, CAL., April 15, 1898.

DEAR SIR:—In response to your favor of the 9th inst. requesting my opinion as to the effects of the recent earthquake on steel-frame construction in this city, I am gratified to state that they have stood the test very satisfactorily. While none of us could have desired such an experience we

have naturally been curious to know how a severe shock would treat the buildings in question, and it is comforting as well as interesting to observe that while the vibration must have been very marked the buildings show no damage from this cause. The hour of disturbance precluded any concerted opinion as to personal experiences during the shake, as the offices of the buildings were empty, but from the reports of the few people who happened to be on the upper floors of two of the taller structures I judge that force of the oscillation must have been in proportion to the height from the ground and possibly by reason of the rigidity of the steel-frame the shock may have been intensified.

One of the three office buildings in which I have had a professional interest rests on piles averaging twenty-eight feet, driven to hardpan, in which the estimated load is very much within the limit of subsidence for each pile. The occupants of the top story of this building had an uncomfortable shake up, but the building shows no damage.

As the several members of steel-frames are either cased in terra cotta or imbedded in the masonry, we have no ready means of observing the lateral or shearing strains, which are the especial points of interest to the architect, but the fact is demonstrated that in properly constructed steel-frame buildings an earth quake will leave fewer marks of its force than in the cases where the walls have been anchored to wooden beams in the ordinary method of construction.

Very truly yours,

CLINTON DAY, ARCHITECT.

Editor California Architect and Building News.

SAN FRANCISCO, April 22, 1898.

DEAR SIR:—Referring to your favor of April 9th, asking my general observations, together with the result of my examinations, upon buildings which I have built lately in San Francisco, of the effect of the recent earth-quake, I beg to state as follows:—

On the morning following the shock I visited several of the buildings in question, the first one being Mr. W. F. Whittier's residence on the NE. cor. Jackson and Laguna streets, and as far as the exterior of the building was concerned noticed no effect whatever. I did not go inside, but afterwards saw Mr. Whittier at his office and, upon inquiring as to any damage done, he said there was none except the shaking down of a few flakes of loose plaster. The only place that this occurred was on the wall side of the rear stairway where the plastering ran continuously from the first story floor passed and above second story floor. At the junction of the second story floor there are joists usually placed running horizontally and parallel with studing. These joists had shrunk and buckled the plaster off slightly, producing cracks, and it was the loose plaster from the cracks which was shaken down in a fine dust on the floor below. Otherwise no damage throughout the entire building.

In the W. S. Clark Building, NE. cor. Bush and Battery streets, I examined same carefully from top to bottom inside as well as outside, and was unable to detect the slightest damage, there being no cracks visible except such as could be accounted for by natural causes and which existed before the earthquake occurred. This building is one denominated in the Fire Ordinances as Class B. It was built upon made ground, the foundation being piled. The piling

of this building was rather peculiar, inasmuch as the original shore line of the bay of San Francisco ran diagonally from the NW. corner of the building to the SE. corner, thus cutting the lot in half, the Western triangle being upon firm ground and the Easterly triangle on mud. This I ascertained when piling, the piles in outer triangle being 60'0" long at the extreme NE. corner of the building and from thence running to SW. corner of building down to 14 or 15 feet in length. The building was originally calculated, however, very carefully, as far as weights were concerned and the same amount of load per square foot imposed upon the foundation in all cases. Whether this had anything to do with its stability I am unable to state positively, but I believe that it had a good effect in keeping the building free from damage. In other words, when the shock came, one part of the foundation being as strong as the other, the building moved as a whole and was not shaken in parts as would probably be the case were one part of the foundation less strong than another.

In the Hobart Building on Market street which I built twelve or thirteen years ago, and which was the first building in San Francisco to use partial steel construction, I noticed no evidence of disturbance on the exterior. I only looked at front however and did not examine the interior, as the building has since been altered and made into offices. Throughout the entire front, which is a very complicated piece of construction I did not notice any cracks whatever.

The Union Depot and Ferry House I examined very thoroughly and carefully throughout, and the only cracks I could find were at the junction of the tile partitions with the overhead beams, and in one or two cases the walls themselves had cracked and some of the plastering fallen off. The cracks at the junction of the beam and top of partition were caused, in my opinion, by there not being placed on the underside of the beams any means of fastening or steadying the tile wall. The original specifications did not provide anything and no steps were ever taken subsequently to fasten them. Had there been a 4" channel placed flat side upwards into which the partition could have been wedged, there would probably been no cracking.

The only other evidences of disturbance I found around the building was in the upper stories of the tower in SE. corner thereof, where a small crack, probably a sixteenth of an inch in thickness, made its appearance in second and third stories.

I examined very thoroughly the junction of the tower with the main building and found no cracks, which was rather remarkable considering the fact that this tower is 245 ft. high and must have vibrated considerably at the top. This would produce a crushing and grinding effect on its junction with the main building, but so far as I could see not the slightest effect was produced.

I examined particularly the grand nave, which is an open space 45'0" wide and 660'0" long running about north and south, from which direction the shocks came principally. This nave is covered throughout its entire length and width with marble wainscoting in large slabs, there being a base about 2'0" high, then a plain space about 9'0" high, capped with a complicated marble cornice. I looked principally for evidences of disturbance in the vertical joints of the long slabs, which were, as I said before, 9'0" high and about an average of 4'0" wide. I was very much surprised to find that there was not even the slightest crack visible, the original pointing being all in place and no spawling of edges having taken place. This is more remarkable when it is