

NOTICE OF MEETINGS.

SAN FRANCISCO CHAPTER, AMERICAN INSTITUTE OF ARCHITECTS, meets second Friday of each month at 405 California street.
 SETH BABSON, Pres. GEO. W. PERCY, Vice-Pres.
 OLIVER EVERETT, Sec. JOHN M. CURTIS, Treas.

SOUTHERN CALIFORNIA CHAPTER AMERICAN INSTITUTE OF ARCHITECTS, meets first Wednesday of each month at 114 Spring street, Los Angeles, Cal.
 OCTAVIUS MORGAN, Pres. A. M. EDELMAN, Vice-Pres.
 ARTHUR B. BENTON, Sec'l. AUGUST WACKERBARTH, Treas.

TECHNICAL SOCIETY OF THE PACIFIC COAST, meets first Friday of each month at Academy of Sciences Building.
 C. E. GRUNSKY, Pres. GEO. W. DICKIE, Vice-Pres.
 OTTO VON GELDERN, Sec. W. C. RALSTON, Treas.

CALIFORNIA ELECTRICAL SOCIETY, meets the first and third Monday evenings of each month at the Academy of Sciences Building.
 GEO. P. LOW, Pres. C. O. POOLE, Vice-Pres.
 MAX CASPARI, Sec. H. T. BESTOR, Treas.

THE POSTOFFICE SITE.

THE following official report of the United States Government engineers, as to the stability of the site selected for the new Postoffice building in San Francisco, located at the corner of Seventh and Mission streets, seems to set at rest all questions as to the permanency of any building erected on this lot, and removes the last reasonable ground for longer delaying the commencement of work on this long needed and long hoped for building.

SAN FRANCISCO, CAL., July 8, 1895.

The Honorable Secretary of the Treasury, Washington, D. C.

SIR:—The undersigned, appointed in accordance with the provisions of the act of Congress, approved March 2, 1895, to examine the site for the Postoffice and Courthouse building in San Francisco, have the honor to render the following report:

Under date of April 5, having received notification of appointment to perform the duties assigned to us, we reported to you for instructions to guide us in the proposed examinations. On May 27th instructions were issued from the acting Secretary of the Treasury and received by us on June 4th. In this letter we were requested "to examine the nature of the subsoil and bed of the foundation, and to report to the department whether the character of the same is proper for the contemplated building, and what would be the cost of making the foundation for said building, and whether the construction of said building should be proceeded with on said site." We were further requested to make a recommendation as to the character of the foundation and present an approximate estimate of same.

Immediately after the receipt of the above mentioned letter proposals were invited from S. M. B. Haley, who made the former borings on the site, and the Beal Core Drill Company. One bid was received, that of Haley. Mr. Haley proposed to bore the site to a depth of 30 to 50 feet at the rate of \$1.25 per foot; beyond 50 feet he was to receive 50 cents additional for each foot.

Under the former action of the Treasury Department four borings were made at the site. These borings will be designated A, B, C and D. Their locations approximate to the four corners of the building. A was near the southwest corner and was sunk to a depth of 149 feet. B was near the southeast corner, depth 111 feet. C was near the northwest corner, depth 147 feet. D was near the northeast corner, depth 140 feet. In a general way the borings at B, C and D show that to a depth of 38 to 40 feet clean sand of varying colors was found; thence to a depth of 50 feet clay was found and below that sand of different grades and colors.

In boring A the indications were not so favorable in the upper strata, as the sand was found mixed with vegetable matter, debris, peaty sand, etc. Our boring indicates like nature of material at same location, extending through only a limited area.

We made eleven additional borings to a depth of 50 feet each. Their location is shown on the foundation plan. They are designated by numbers. Borings 1 to 6 inclusive show that to a depth of about 38 feet clean sand of varying colors was found, as in the previous borings; then a stratum of black peat about 6 inches in thickness; then about a foot of heavy black mud, and below that to 50 feet slate-colored clay. Borings 7, 8, 9 and 10 were made at the southwest corner, as at this location the nature of the sub-soil appears to indicate that some additional precautions should be taken in preparing the foundation, and the accompanying diagram shows the locations of these five borings. No. 7 was in the immediate vicinity of A. Yellow, black and white sand was found to a depth of 24 feet; thence to 40 feet sand, mud, debris, in general rather soft material, and below that to 50 feet sand and clay. No. 8 showed the general characteristics of borings 1 to 6. No. 9 showed common sand to 19 feet; then 1 foot of soft black mud and decayed vegetation; then 1½ feet of black peaty mud and sand, filled with sticks, roots, etc.; then good sand for 18½ feet, with a few grass roots at about 29 feet; at 40 feet 1 foot rotten wood and soft mud; then black clay, hard and sticky; 1 foot thick; then slate-colored and yellow sandy clay to 50.3. Nos. 10 and 11 had the usual characteristics of the first borings; that is, sand to 38 and 40 feet, and clay below to 50 feet. The results of the borings are shown on the tracings inclosed.

Throughout the site the general indications are of hill sand to depth of about 28 feet below the surface of the ground, and below that clay. The Coast Survey chart of 1858 shows that the site was a sand lot covered with brush and small trees. There was no indication of running water on the lot. It is only in the northwest corner for a distance of from 50 to 60 feet along Seventh street and along Mission that the material is of such a nature as to cause extra precautions to be taken with the foundation. Water was found at a depth of 8.8 to 12 feet. The surface of the ground was connected by levels with the beach mark (29.04) and the level of the water standing in each well was determined. This latter level is shown on the plats.

It may be stated that the material as found and brought to the surface may not show its condition in place, as the boring apparatus necessarily broke up the mass, and its mixture with the water in the well caused it to appear soft and yielding. It may be that in its natural condition it may stand the same amount of pressure as in other portions of the site.

To the first inquiry, therefore, whether the character of the subsoil is proper for the contemplated building, we are of the opinion that the building can be safely constructed upon it. As to the inquiry whether the construction of the building should be proceeded with, from an engineering point of view we see no reason to report otherwise.

It remains for us to state in a general way only the character of the foundation and to present an approximate estimate of the same. The foundation should be of concrete. The depth is given at 4½ feet. For the purpose of approximating to the cost we have taken that depth for the main walls and a depth of 3 feet for the columns, making the top of said foundation two feet wider than the base of the wall. For a length of 60 feet on Mission street and on Seventh street, where the soft material is found, the base of the foundation is increased to 25 feet. It is assumed that the ground can be drained into the street sewer for a depth of about nine feet. The water that may be found in the sand to be extracted by pumping will probably depend upon the season in which the excavation may be done. It is hardly capable of estimate, although we insert an item for the work.

The approximate estimate of the cost of the foundation is as follows: Excavation of 9528 cubic yards of material and disposal of same at 50 cents per cubic yard, \$4764; 3892 cubic yards of concrete at \$7.50, \$29,190; pumping, \$2,000. Total, \$35,944. Contingencies, 10 per cent, \$3,595. Total,

\$39,549. The concrete proposed consists of the best Portland cement, with twelve cubic feet of selected sand and thirty cubic feet of broken stone to the barrel.

Very respectfully, your obedient servants,

G. W. MENDELL,
Colonel Corps of Engineers.
W. H. H. BENYAUD,
Lieutenant-Colonel Corps of Engineers.

EUROPEAN FORESTRY WORK.

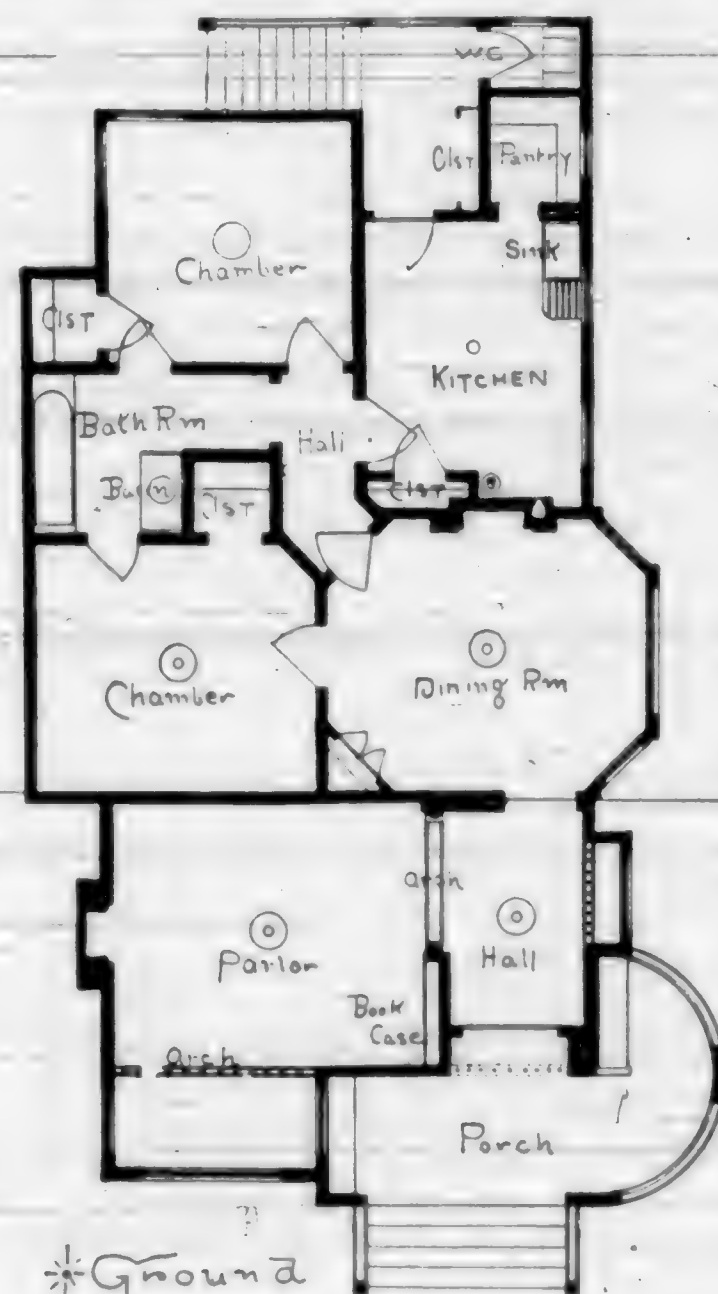
NEARLY all the nations of Europe are engaged at the present time in so controlling the forest supply that every bit of public and private property in trees is placed under restriction against destructive cutting. The forests are all so highly protected, says the *Boston Herald*, and even where no state control exists, the freedom in cutting trees which exists in this country is unknown.

In Germany during the last twenty-five years some

subject of forestry, and schools are everywhere maintained for the purpose of instructing men in this work. Russia has been the only nation where forests have been until lately under no restriction, but since 1888 even this country has had its forest laws, and offers loans on favorable terms for the protection and increase of the forests. Hardly any European nationality is without its state control of the forests or without the training schools in which men are instructed how to take care of them.

They are trying in Europe in every way possible to save the forests, and in the United States efforts are now being made in nearly every commonwealth to regulate and control the wooded lands, but our people are not ready to accept the stringent measures which have been employed as a necessity for preservation.

Mrs. Doolan—"It's too proud yez are t' talk, Norah Foley since yez won th' bicycle in th' tin cint raffle; but if thim ain't yer ould man's pants Oi'm a nagur."—*Leslie's Weekly*.



COTTAGE \$1800.00 COMPLETE



300,000 acres have been reforested, and the government has granted \$300,000 in this way to private owners of waste land. In Austria, since 1852, a forest law, which exercises a strict supervision over the forests, both public and private, has been in existence, and no one is allowed to devastate a forest to the detriment of adjoining holders of land, and cleared or cut forest must be replanted within five years.

In Italy the effort is constant to increase the amount of wooded-lands, and the government contributes three-fifths of the cost of reforestation, upon condition that the work is done according to its plan and instruction. In Switzerland the national government contributes from 30 to 70 per cent of the establishment of new forests, and from 20 to 50 per cent for the planting of protected forests, and the law is very strict in regard to cutting.

France is also deeply interested in public forest property. The forests belong largely to communities and public institutions, as well as to the state, and they are controlled in a manner similar to the regulation of forests in Germany. Here, as well as there, no clearing is allowed except by consent of the forest administration.

In all these countries the strictest attention is paid to the

BOOKS AND PERIODICALS.

LIPPINCOTT'S Monthly Magazine for July has for the complete novel "A Social Highwayman" by Elizabeth Phipps Train. Among the contents we notice "The Whole Duty of Women" by Emily B. Stone and "The Recall of Flathers" by Charles Dudley Rhodes, U. S. A., is a sketch that will make the readers laugh.

THE ENGINEERING NEWS—We would call the attention of our readers to an able article in this magazine on "Painting Iron Railway Bridges," by Walter G. Berry of New York. In the course of his professional duties Mr. Berry was called upon to prepare a report upon this subject, and certainly he has made a very able one.

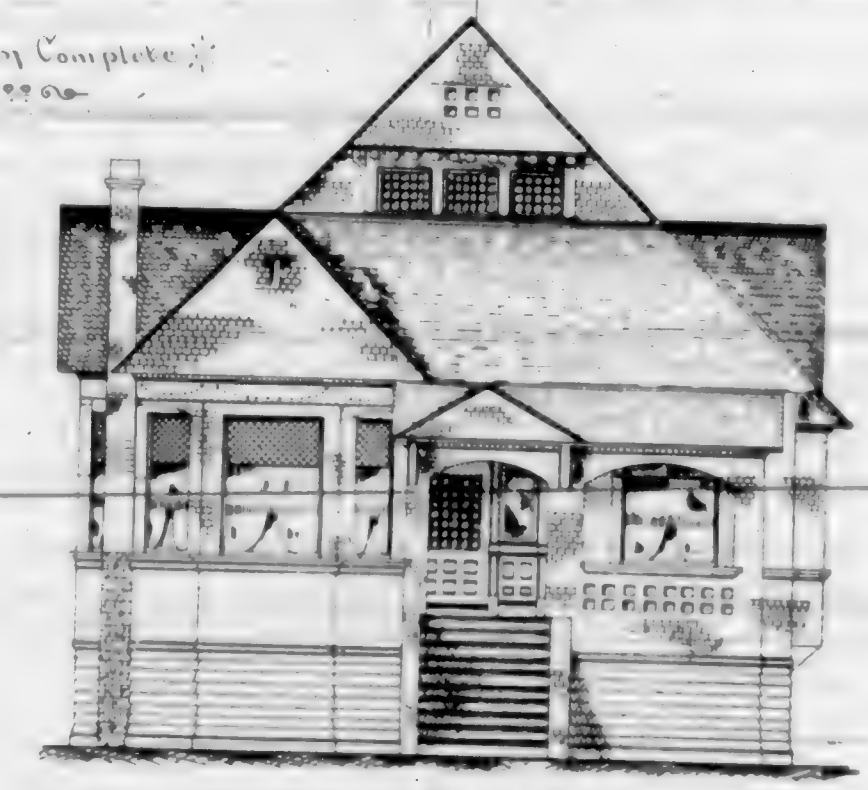
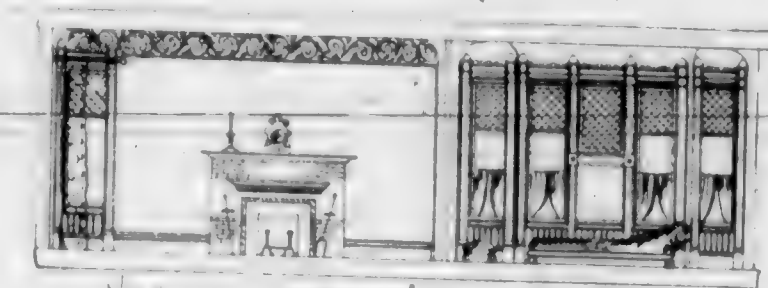
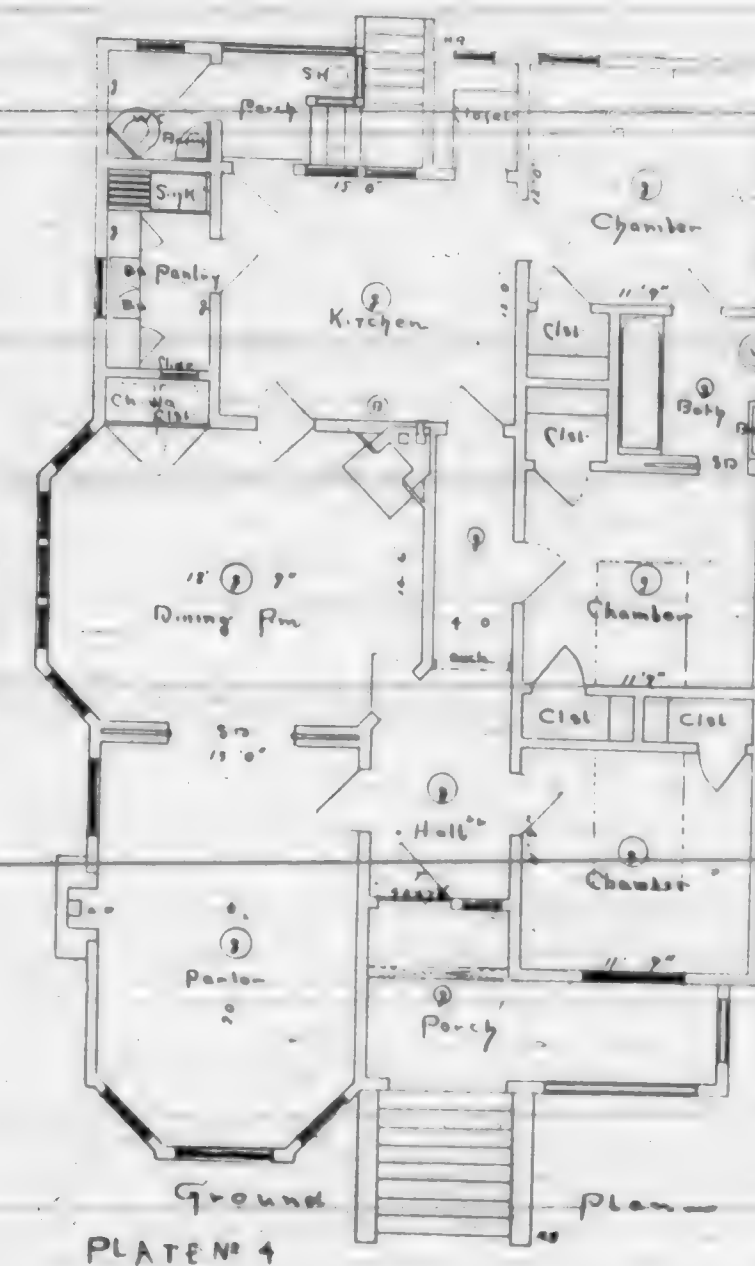
THE NEW GALAXY, published by Harry C. Jones, 92-96 Fifth Ave., New York. Subscription price one dollar a year. Volume 1, No. 1 of this magazine for June, 1895, makes a very pictorial appearance while it contains much interesting reading, fully illustrated; it appears to be a tender for the *Monthly Illustrator* at \$3 a year, which the same publishers announce as the finest magazine published, containing only original matter by the very best writers and the most beautiful pictures.

a note she would come, always crossing the note. I became so certain about it after awhile that I would write the note and tear it up. The thought would stir in her the desire to see me. There was no use in mailing it.

"The sight of a certain handwriting would always make my heart sink; it was something that I could not reason myself out of, yet the letters were pleasant and the words fair. One dark day I found out that my instinct was right. I trust it now."

THE NEW SCIENCE REVIEW for July 1895, published by the Transatlantic Publishing Company, 63 5th Ave., New York, has a table of contents of unusual interest.

"The trouble with too many women," says the cornfed philosopher, "is that they regard the marriage ceremony mainly as a license to eat onions and wear ill-fitting clothes."—*Journal Indianapolis*.



The following from an article on "Mental Telegraphy" by Claude Stuart Coles is certainly curious if true:

"Within us is a power, sleeping. Once in a while some sensitive soul has felt it stir, but there was no known law that governed it, no logic with which to convince others of its being; so it was buried deep in the inner consciousness, where hide ideas that dare not seek light, because they are in advance of their age."

"Long ago, at the house of a friend, I saw a photograph of a man's head. As I picked it up there came over me a sense of having known the original; it was the face of a friend! When my hostess entered I asked about the photograph, and she told me who it was. The name meant nothing to me, but the face meant all things that I knew. Several times in the next week I looked at the photograph, always with the same sense of 'having known.' Then eight years elapsed, during which no memory of that face came to me. One day at the theatre, there flashed over me that same curious sense of 'having known.' Instinctively I turned and caught full the glance of the original of the photograph. What he was doing there I have never found out."

"Several miles away from me lived a friend. Days would elapse without our meeting, but if I sat down and wrote her

"Grace before meat," said Noah, as he held the elephant back to make room for the antelope.—*Yale Record*.

CONTRACT vs. DAY LABOR.

THE question as to whether day-labor or contract is the more economical appears to have received a very decided answer in the experiences of the Canadian Federal Government. The point is being continually brought up in municipal councils, but in such cases, it is to be feared, the arguments *pro* or *con* are usually propounded by those more or less biased one way or the other, and a clear candid opinion as to the merits or demerits of either system can hardly be expected from city aldermen. The opinion of Parliamentary committees ought to be worth more, at any rate, both systems have been given fair trials in the last few years here, and the results are eminently in favor of contracts. The case of the Lachine bridges, which was re-

counted in the last Canadian letter, proved conclusively how easily the country may be defrauded, and up to almost any amount, by unscrupulous contractors. A legal precedent for the construction of the Lachine bridges was set some years ago by the plan pursued in the case of the Fort Francis locks. This costly and magnificent work was carried out by the Government, under its own inspectors, without contract, and the results were not satisfactory; but it was thought that in a city like Montreal, where labor was plentiful and wages moderate, better results must be obtained. However, as was shown in the former letter, the Government was doomed to bitter disappointment which was only aggravated by the police magistrate, Judge Desnoyers, refusing to commit the contractor for trial, although the evidence seemed clear enough as to the alleged frauds, but not, in his opinion, sufficient to warrant committal. The matter, however, is not at an end yet. Although the Government has failed in the criminal prosecution, a case for the return of overpayments is to be proceeded with. The country will hardly care to see more of its great works carried out by day-labor. The experiment of the Toronto Council in having its new municipal buildings finished by day-labor is being watched with interest. This building was begun under contract, but only reached some twenty feet above the ground level, when the contractor was dismissed. Owing to certain difficulties in obtaining satisfactory tenders for the completion of the works, it was decided to proceed with them by day-labor.

Mr. Provand, M. P. for the Blackfriars Division of Glasgow, the managing director of the Chignecto Marine Railway Company, has been in Canada interviewing the Government, and requesting for this Company an extension of time for completion of the works at Chignecto by two years. About three and a half millions have been already expended on the works, and about a million and a half more are required. The amount has been subscribed by shareholders, and it is claimed that the work could be completed in the time asked for. The Canadian Government guaranteed a subsidy of \$170,000 a year, for twenty years after the completion of the works, the period of construction being limited in the Charter granted to the Company. Mr. Provand stated that it was through no fault of the Company that the work was not completed within the time specified. It was the fault of the contractor, who was largely interested in contracts in the Argentine Republic at the time of the suspension of Baring Bros., which caused his failure and the stoppage of the works. The engineer of the Company, together with Mr. Provand, visited Canada last year, with the same object in view, and interviewed the premier, the late Sir John Thompson, but, so far as is known, did not obtain any definite promise from him. Whether Mr. Provand has been successful this time or not is still uncertain, but a contention has arisen over the interpretation of the expression "efficient working" of the railway, which occurs in the agreement referring to the granting of the subsidy. The Company interprets the words to mean simply having the railway completed and ready for traffic. The other interpretation is that the road should be actually handling a reasonable amount of traffic, and it is said that if the Company desires the extension of time, it will have to show that it is carrying a minimum amount of traffic, which is put down at a million tons of shipping, annually. Mr. Provand has, in the meantime, gone home, and it is possible some time will elapse before anything is settled.—*The American Architect and Builder.*

LEGAL DECISIONS.

From a large number of Legal Decisions of the higher Court, of the different States of the Union, we select and publish in this column, such as appear applicable to this section of the country.

LIABILITY OF CONTRACTOR'S BOND.—Where a building contractor abandons the work before it is completed, and absconds, the guarantor of his contract, who elects to treat the failure and flight of his principal as settled facts, and to co-operate with the owner in completing the work, becomes liable as surety. *Tender v. Kluge, Supreme Court Penna., 31 Atlantic Reporter, 550.*

UNGUARDED EXCAVATION IN SIDEWALKS.—The Supreme Court of California holds, that a contractor who has completed an excavation in a sidewalk, as required by his contract, is not liable for injuries to persons falling into it, due to the absence of proper guards, if he did not contract to guard the excavation after it was completed. *Cotter v. Lindgren, 39 Pacific Reporter, 950.*

RIGHT OF ADJOINING OWNER IN OVERHANGING WALL.—The Supreme Court of New York, 1st Department, holds that where the owner of a lot erects a wall, the foundation of which is wholly on his lot, but a part of which overhangs an adjoining lot, the adjoining owner will not be enjoined from removing so much of the wall as overhangs his property. *Lyle v. Little, 33 N. Y. S. Reporter, 8.*

MECHANICS' LIENS.—Where it appeared in an action to foreclose a lien on property owned by husband and wife, that the title was in the name of the husband only, and that knowledge of the fact that he had a wife was not brought home to the lien-holder, it was not error to render judgment for the latter, although the notice omitted the name of the wife. *Wash. Rock-Plaster Co. v. Johnson, Supreme Ct. Wash., 39 Pacific Reporter, 115.*

COLLECTION OF NOTES GIVEN FOR BUILDING.—Where notes were given in prepayment for the performance of a building contract, and their sale as negotiable paper was consented to by the makers at the time the contract was entered into, they cannot, in the absence of fraud, raise the issue of no consideration, in an action upon the notes by an indorsee; and they cannot contend that such party is not a bona fide holder. *Churchill v. Bielstein, Ct. Civ. App. Tex. 29 S. W. Reporter 392.*

MECHANICS' LIEN—BOND OF OWNER.—A bond given by the owner of buildings upon which a notice of lien for materials and labor has been filed, conditioned for the payment of any judgment that may be rendered against the property, (as provided by the laws of New York, and some other states) takes the place of the property, and discharges and becomes the subject of the lien; and an action is maintainable upon the bond against all parties interested, including the sureties, without first foreclosing the lien upon the property. *Morton v. Packer, Ct. App. N. Y., 40 N. E. Reporter, 3.*

PENALTY OR LIQUIDATED DAMAGES.—A party advertised for bids for a court house, the notice requiring each bid to be accompanied by a check for \$500, "as guaranty of good faith that the bidder, in case his bid is accepted, will enter into a contract," etc. One whose bid was accepted failed to enter into a contract within a reasonable time, whereupon the check was appropriated. The Court of Civil Appeals of Texas held that the money deposited was not liquidated damages, but a penalty, and only so much of it could be retained as would cover the actual damage. *Lindsey v. Rockwall County, 30 S. W. Reporter, 380.*

LIABILITY OF OWNER FOR DANGEROUS PREMISES.—A party was injured by the falling of a wall of a building. The owner denied negligence, and alleged that the property was in the possession of an insurance company, who were making repairs. The Supreme Court of Louisiana held that, there was negligence and that whatever may have been the responsibility of the insurance company during the time that the repairs were being made to a portion of the wall, the owner, aware of the facts as to defective condition, and who takes no part to prevent an accident, is liable for the damage occasioned by the fall. The safety of walls in a populous city is a public interest, and the interest of one injured is blended with the public right that cannot be subordinated to indefinite agreements between the insurer and insured. *Knoop v. Alter, 17 So. Reporter, 139.*

BUSINESS MOSAICS.

Heating and Ventilating.—Wright & Olsen at 27 New Montgomery street will furnish estimates for buildings of any size, for heating with either steam, hot water or warm air, also a combination of hot water and warm air.

This concern is agent for the Magee furnaces and ranges as well as Abram Cox Furnace Co., Barbers Ideal Heaters, and Dr. Buckley's water purifier.

Mr. Nincom.—"He presented a pistol and declared he'd blow out my brains if I didn't yield." MISS SHAPLEY—"Oh, Mr. Nincom, why didn't you yield?"—*Truth.*

A. Steiger Son's manufacturers of Architectural Terra Cotta, with every thing in their line of business. For further information apply to San Jose, Cal. or San Francisco office Builders' Exchange, 16 Post street.

Pat.—"I tell you, Mike, astronomy is a great thing. Why by it you can tell when there will be an eclipse to the very hour and minute." MIKE—"Oh, faith, an' that's nothin', you can look in the almanac an' see that."—*Truth.*

Concrete and Twisted Iron.—The Ransome Patents, now operated by the firm of Keatinge, Leonard & Ransome, rooms 11 and 12 Nucleus building, are showing the advantage of this style of work as is in evidence by the three large tanks for the Portland Water Works, and to come near home an example of their work at Main and Mission streets in this City may be seen, and quite at our own door as it were, the work on the Safe Deposit Building will show the advantage of this style of construction.

Customer.—"So you sell these watches at \$2.50 each? It must cost that to make them." JEWELER—"It does." CUSTOMER—"Then how do you make any money?" JEWELER—"Repairing them."—*Standard.*

When a man decides upon improving his shop, factory or farm, by the addition of power, he naturally looks for something entirely up to date. He investigates, considers, and finally decides to buy an Ajax Coal Oil Gas Engine as meeting his requirements more fully, and being safer, than any other power obtainable. Palmer & Rey, San Francisco, Cal., the manufacturers of this engine, have earned the gratitude of the public by placing within its reach a reliable, economical power, that defies the restrictions of insurance companies. It is the latest and best.

The J. L. Mott Iron Works, New York, Boston, Chicago and San Francisco, Mr. M. S. James, agent of the well-known firm has removed his office to room 27 Flood Building, third floor.

The new apartments are very favorably situated for the display of goods shortly to arrive from New York when a show room will be opened for the inspection of those interested in their line.

No doubt there are disinterested politicians, my son; but when you find one it will be upon the same day that you discover a shad without bones."—*Boston Transcript.*

The Union Pressed Brick and terra cotta Co., with their works at Vallejo, California, have removed their general office to 310 Pine street, room 15, San Francisco, and are prepared to fill orders in their line for architectural terra cotta, fire proofing, paving tile, etc. A catalogue will be sent on application.

Robinson.—"Well, old chap, how did you sleep last night?" SMITH (who had dined out)—"Like a top. As soon as my head touched the pillow, it went round and round!"—*Punch.*

F. H. Rosenbaum & Co. Anything in the way of plate and window glass can be supplied by the above mentioned firm, who are also manufacturers of mirrors, either quicksilver or patent backs. Ornamental cutting and bevelling a specialty, 567 Market street, San Francisco.

Temperance LECTURER.—"Friends, how can we stop the sale of liquor?" INEBRIATE (in the rear of the hall)—"Give it away."—*E.V.*

Plaster of Paris. The Golden Gate Plaster Mills, 125 and 217 Main street, San Francisco. Lucas & Co., manufacturers of Calcined Plaster (Plaster of Paris,) dealers in marble dust, sand plaster and terra alba.

Jones.—"Come, go fishing with me old chap." BROWN—"Can't do it: just signed the pledge."—*Judge.*

Sierra Lumber Company, manufacturers and dealers in doors, windows and blinds, also on hand sugar pine, yellow pine, spruce and fir lumber. Yard, corner Fourth and Channel street, San Francisco.

CITY BUILDING NEWS.

Baker near Fell. To build; owner, Premier Cycle Co.; architects, McDougall & Son; contractor, J. M. Weir; signed, June 19; filed, June 19; cost \$1794.

Brannan bet. 4th and 5th. Brick warehouse; owner, Ed. Nicholas; mason work by contract; carpenter work by day; cost \$5000.

Brannan bet. 4th and 5th. To build; owners, Morgan & Catter; cost \$800.

Brannan bet. 4th and 5th. One-story frame; owner, Father Nugent; contractors, Cameron & McDonald; cost \$2000. Only a temporary structure.

Bryant near 22d. To build; owner, C. W. and Anna M. Peck; contractor, Thos. Cochrane; signed, June 24; filed, June 27; cost \$2250.

Bryant and Alameda. Alterations and additions; owner, Market Street railway Co.; architect, H. H. Lynch; contractor, J. W. Miller; signed, July 8; filed, July 9; cost \$15,330.

Bryant and Alameda. Carpenter work; owner, Market Street Railway Co.; architect, H. H. Lynch; contractor, Frank Schaad; signed, July 9; filed, July 9; cost \$1130.

Bryant near 5th. Concrete foundation; owner, John Horstmann; architect, H. Geiffuss; contractors, Gray Bros.; signed, July 9; filed, July 9; cost \$2265.

Broadway near Kearny. To build; owners, A. Coreghino and G. Demartini; architects, Wm. Mosser & Son; contractor, H. H. Larsen; signed, July 10; filed, July 11; cost \$1100.

Broadway near Kearny. Carpenter work and plumbing; owners, A. Coreghino and G. Demartini; architects, Wm. Mosser & Son; contractors, Ingerson & Gore; signed, July 10; filed, July 11; cost \$1360.

Bluxome bet. 4th and 5th. To build; owner, Mr. Smith; contractors, Schmitt & Kreeker; cost \$600.

Bush near Laguna. Sewers, plumbing, etc.; owner, Congregation Ohabei Salome; architect, M. J. Lyon; contractors, Bertram & Son; signed, June 11; filed, July 1; cost \$911.

Bush near Laguna. Brick and cement work for foundation; owner, Congregation Ohabei Salome; architect, M. J. Lyon; contractor, Wm. Stevenson; signed, June 13; filed, June 18; cost \$1600.

California near Mason. Excavations, concrete, etc.; owner, Elizabeth J. Elliot; architect, E. Depierre; contractors, Gray Bros.; signed, June 29; filed, July 3; cost \$1768.

Castro and 19th. To build; owner, M. Sanders; architect, H. Geiffuss; contractors, Lorenzen & Feyder; signed, July 3; filed, July 3; cost \$1490.

Caselli near Douglas. To build; owner, Mrs. Annie Lucy; architects, Shea & Shea; contractor, Arthur Stevens; signed, July 3; filed, July 10; cost \$2295.

Church near 27th. Additional story; owner, John Fogge; architects, Havens & Topke; contractor, D. Ross; signed, June 28; filed, July 2; cost \$1645.

Cole and Waller. Five two-story frame dwellings; owners and builders, Cranston & Keenan; cost \$20,000.

Cole and Waller. To build; owners and builders, Cranston & Keenan; cost \$500.

Clayton near Waller. Three two-story frame dwellings; owner and builder, Wm. Hinkel; cost \$12,000.

Clement and 33d Ave. Car house; owner, Sutor Railroad Co.; architect, V. Krolow; contractor, T. McLachlan; signed, June 16; filed, June 27; cost \$7250.

Fourth near Howard. Carpenter work for four-story brick; owner, Hugh Dimond; architect, C. J. I. Devlin; contractor, J. W. Smith; signed, June 20; filed, July 8; cost \$6695.

Fourth near Howard. Plastering; owner, Hugh Dimond; architect, C. J. I. Devlin; contractor, Martin Garrick; cost \$1100.

Fourth near Howard. Brick, granite, etc.; owner, Hugh Dimond; architect, C. J. I. Devlin; contractor, P. F. Fitzsimmons; cost \$5895.

Fourth near Howard. Plumbing; owner, Hugh Dimond; architect, C. J. I. Devlin; contractor, Jas. E. Britt; cost \$1987.

Fourth near Howard. Iron work; owner, Hugh Dimond; architect, C. J. I. Devlin; contractor, H. Halston; cost \$5600.

Fourth near Brannan. To build barn; owner, Mrs. Zoe J. Vengard; architect, C. M. Rousseau; contractor, R. J. Pavert; cost \$1240.

Fourth near Howard. Galvanized iron work for four-story brick; owner, Hugh Dimond; architect, C. J. I. Devlin; contractor, Jas. Guilfoxy; cost \$1000.

Fourth near Brannan. To build; owners, King & Yung; architect, F. Mead; contractor, W. H. Mead; cost \$1000.

Fourth near Brannan. To build barn and stable; owner, H. B. Gockens; days' work; cost \$1000.

Filbert near Mason. To build; owner, Mrs. Mary Bogan; architect, C. M. Rousseau; contractor, C. Knutler; signed, July 10; filed, July 11; cost \$4209.

Filbert and Jasper. To build and alterations; owner, Trinidad Boyling; architect, P. Boyling; contractor, L. M. Weissmann; signed, June 25; filed, June 27; cost \$2129.

Fillmore near Waller. Alterations and additions; owner, Geo. Scott; architect, A. J. Barnett; contractor, M. Hartnell; signed, June 22; filed, July 2; cost \$1725.

Fifth near Bryant. To build; owner, C. Reichling; days' work; cost about \$2000.

Francis near Mission. Cottage; owner, J. B. Mathews; contractor, W. W. Rednall; signed, July 9; filed, July 9; cost \$695.

Fulton near Broderick. To build; owner, Patrick Lally; architect, H. Gelfuss; contractor, W. A. Muller; signed, June 17; filed, June 17; cost \$3635.

Gough near Vallejo. To build; owner, Edward B. Rambo; contractor, W. H. Wharf; signed, June 20; filed, June 21; cost \$5554.

Green near Scott. To build; owner, Robert K. Palach; architect, Edgar A. Mathews; contractor, Andrew T. Ruch; signed, June 6; filed, July 2; cost \$1729.

Greenwich near Jones. Two three-story buildings; owner, C. Bill and J. Chienutz; architect, Emil John; contractor, J. McLean; signed, June 11; filed, June 28; cost \$7725.

Guerrero near 15th. Two two-story frames; owner, W. J. B. Henryville; architect, T. Godart; contractor, J. A. Arnott; signed, June 20; filed, June 22; cost \$6885.

Harrison near 25th. Alterations and additions; owner, Mrs. Margaret Godahl; contractors, Westerlund & Holmgren; signed, May 18; filed, June 21; cost \$1400.

Hayes near Webster. To build; owner, Mrs. Mary Marsily; architect, C. M. Rousseau; contractor, R. J. Pavert; signed, June 22; filed, June 25; cost \$8875.

Haight near Scott. To build; owner, Mrs. F. Cahill; architects, Mahoney & Ryland; contractors, Ackerson & Paterson; signed, June 23; filed, June 29; cost \$4923.

Haight and Fillmore. Alterations and additions; owner, Chas. Haignauer; contractor, G. F. Gillespie; signed, June 6; filed, June 18; cost \$4500.

Helen near California. Alterations and additions; owner, John J. Mundwyler; contractor, H. R. Schmuckert; signed, June 27; filed, June 27; cost \$2645.

Holy Cross Catholic Cemetery. Vault lined with marble; owners, Executors Estate of J. Krasovicky; architect, B. J. Clinch; contractor, A. Battenghi; signed, June 21; filed, June 21; cost \$9425.

Jackson near Steiner. To build; owner, Austin C. Tubbs; architects, Matheson & Howard; signed, June 12; filed, June 21; cost \$3340.

Jessie near 14th. To build; owner, Mrs. C. L. Straven; contractor, A. Petty; signed, July 8; filed, July 8; cost \$1600.

Laurel Hill Cemetery. Granite coping and concrete foundation; owner, Sharon Estate Co.; architect, A. Page Brown; contractor, P. Deegan; signed, June 28; filed, July 1; cost \$1498.

Lombard near Fillmore. Three two-story buildings; owner, Michael Hogan; contractor, C. Andresen; signed, June 1; filed, June 19; cost \$6250.

Market near 5th. Sowers, plumbing, etc.; owner, Mrs. Abbey M. Parrott; architects, Pissis & Moore; contractor, R. A. Vance; signed, June 19; filed, June 24; cost \$38,775.

Market bet. 5th and 6th. Mosiac floor, etc.; owner, Miss Emma Spreckles; architects, Reid Bros.; contractors, W. W. Montague & Co.; signed, May 28; filed, July 2; cost \$8000.

Market bet. 5th and 6th. Marble work; owner, Miss Emma Spreckles; architect, Reid Bros.; contractor, W. S. Brown & Co.; signed, June 13; filed, July 2; cost \$2116.

Market and Sanchez. To build; owner, Mrs. E. L. O'Neil; architects, Salbarn & Embury; contractors, West & Fenn; signed, July 6; filed, July 6; cost \$4235.

McAllister and Fillmore. To build; owner, Caroline B. Watson; architects, Percy & Hamilton; contractor, Winslow Hall; signed, June 26; filed, June 26; cost \$10,943.

McAllister and Fillmore. Plumbing; owner, Caroline B. Watson; architects, Percy & Hamilton; contractor, R. Rice; signed, June 26; filed, June 26; cost \$1500.

McAllister and Pierce. To build; owner, Mrs. B. Morris; architect, J. E. Kraft; contractors, Ackerson & Paterson; signed, June 19; filed, July 8; cost \$6170.

Mission and New Montgomery. Carpenter work on two-story brick; owner, Builders' Exchange; architect, A. Page Brown; contractor, D. Powers; signed, July 8; filed, July 11; cost \$2070.

Mission and New Montgomery. Mason work, Spanish tiles, etc.; owner, Builders' Exchange; architect, A. Page Brown; contractors, Riley & Loane; signed, July 8; filed, July 11; cost \$2307.

Mississippi near 18th. To build; owner, J. Greig; contractors, Westerlund & Holmgren; signed, July 3; filed, July 3; cost \$2464.

Oak and Clayton. To build; owner, Ellen B. Franzell; architects, Coxhead & Coxhead; contractor, Wm. Knowles; signed, July 12; filed, July 12; cost \$7261.

O'Farrell near Powell. Additions and alterations; owner, Mrs. S. O. Alexander; architects, Salfeld & Kohlberg; contractor, H. Rohling; signed, May 24; filed, June 25; cost \$3025.

Pacific near Leavenworth. Alterations and additions; owner, Margaret Wolfarth; contractor, H. R. Schmuckert; signed, June 18; filed, July 9; cost \$1845.

Pacific near Leavenworth. To build; owner, B. Frank; architect, H. Gelfuss; contractor, John H. Munster; signed, June 18; filed, June 20; cost \$3124.

Pennsylvania Ave. and Butte. Alterations and additions; owner, James Eva; architect, R. H. White; contractor, W. Chatham; signed, June 19; filed, June 19; cost \$1993.

Pierce and Fulton. To build; owner, Wm. McCormick; architect, A. J. Barnett; contractors, Ogle & Smith; signed, June 28; filed, July 1; cost \$9700.

Pine near Buchanan. To build; owner, J. A. Ulrich; architect, E. J. Vogel; contractor, M. J. Savage; signed, June 20; filed, June 24; cost \$4630.

Pine near Taylor. Carpenter work; owner, Edward B. Hinds; contractor, M. J. Savage; signed, June 17; filed, June 20; cost \$6500.

Pine near Taylor. Plumbing, etc.; owner, Edward B. Hinds; contractor, Philip Haub; signed, June 17; filed, June 20; cost \$1195.

Pt. Lobos Ave. near 33d. Cottage and stable; owner, Eliza Potter; contractor, W. W. Rednall; signed, June 18; filed, June 20; cost \$2000.

Richland Ave. near Anderson Ave. To build; owners, E. F. and Nellie Sautter; architect, J. V. Embury; contractors, Salisbury & Embury; signed, June 12; filed, June 20; cost \$1700.

Sacramento near Baker. To build; owner, J. H. Loeler; architects, Townsend & Wyneken; contractor, D. Currie; signed, June 25; filed, June 27; cost \$2330.

Sacramento near Devisadero. To build; owner, Esther M. Wilson; architect, W. H. Little; contractor, W. J. Field; signed, June 27; filed, June 28; cost \$4825.

Sacramento near Laguna. To build; owner, Richard E. Queen; architect, A. Page Brown; contractors, Mahoney Bros.; signed, June 18; filed, June 18; cost \$27,095.

Sagamore near Capital. Two cottages; owner, William Forbes; contractor, John Flaherty; signed, June 21; filed, June 22; cost \$1250.

Sixth Ave. near Clement. To build; owner, John Higgins; contractor, M. J. Scott; signed, July 3; filed, July 3; cost \$1170.

Sixth and Stevenson. Steam heating in four-story brick; owner, Margarethe Schwerdt; architects, Faust & Schwartz; contractors, J. G. Grannik & Co.; signed, July 1; filed, July 11; cost \$1246.

Stockton and California. Additions and alterations; owner, Alfred E. Davis; superintendent, J. W. Duncan; carpenters, Cannon & Mooney; cost \$10,000.

Second Ave. near California. To build; owner and builder, Mr. Haskell; cost \$2000.

Second Ave. near California. Cottage; owner, G. H. Earle; architect, J. C. Pelton, Jr.; contractor, Jas. McConahy; signed, June 20; filed, June 29; cost \$1700.

Second Ave. near Clement. Cottage; owner, Isador I Green; contractor, W. W. Rednall; signed, June 18; filed, June 18; cost \$2000.

Scott near Fulton. To build; owner, Mrs. Eliza Baum; architects, Kenitzer & Barth; contractors, Schutt & Krecker; signed, June 25; filed, June 26; cost \$4114.

Tennessee near 19th. To build; owner, Rev. P. O'Connell; architects, Mahoney & Ryland; contractors, R. Doyle & Son; signed, June 16; filed, July 1; cost \$9089.

Third Ave. near Clement. To build; owner, R. I. Whelan; contractor, H. Rowe; cost \$2100.

Twelfth Ave. near California. To build; owners, Jules J. Bailey and wife; contractor, Wm. R. Kenny; signed, June 28; filed, June 28; cost \$1225.

Twenty-second and Guerrero. To build; owner, A. Maracek; architect, E. J. Vogel; contractors, Patterson & Person; signed, June 28; filed, July 2; cost \$8872.

Van Ness Ave. and Clay. Steel work; owner, Claas Spreckles; architects, Reid Bros.; contractors, Western Iron Works; signed, June 12; filed, July 2; cost about \$8000.

Washington near Mason. Alterations and additions; owner, J. Mueller; architects, Mooser & Son; contractors, Patterson & Person; signed, June 28; filed, June 28; cost \$2880.

Washington near Central Ave. To build; owner, Constant Richert; architect, E. Depierre; contractor, Davie Ross; signed, June 21; filed, June 26; cost \$3420.

Washington near Fillmore. To build; owner, Emma Joseph; architect, W. H. Little; contractors, Moore & Cameron; signed, June 28; filed, June 28; cost \$2547.

Waller near Masonic Ave. Four two-story frames; owner and builder, J. Stierlein; cost \$16,000.

Waller near Masonic Ave. To build; owner, Mrs. Martin; builder, J. Stierlein; cost \$4000.

York near 22d. Cottage; owners, Ella and Peter Kammerow; contractors, Ogle & Smith; signed, July 6; filed, July 6; cost \$1700.

York near 22d. Cottage; owner, Robert Goetze; architect, Emil John; contractor, F. A. Hellmuth; signed, July 10; filed, July 12; cost \$1625.

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

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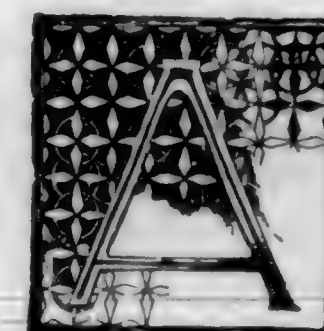
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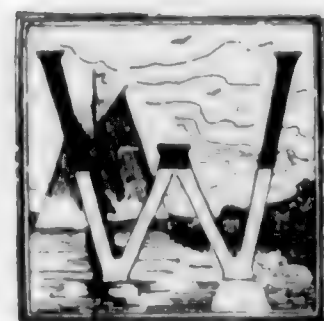


GOOD deal of friction and bitterness will probably be caused between the various parties whose interests are concerned, by the action of the Builders' Exchange in voting that their members shall not bid for the erection of any building where any of the work is segregated. The large contractors hold that to protect themselves it is necessary that they have full control of the building during its construction, and argue that the work can be advanced more rapidly, and done more satisfactorily, than when each branch of the work is made a separate contract, and performed by mechanics who pay no regard to other interests than their own.

This is certainly true on small buildings, and saves time to the owner, and annoyance to the architect; but when it comes to construct a modern building costing tens or hundreds of thousands of dollars, there are arguments to be

advanced in favor of subdividing the work. The owner may have preferences as to who shall perform certain branches of the work and is desirous of choosing such parties as he has reason to believe will give the best satisfaction and do the best work, whereas the main incentive of the principal contractor will naturally be to secure the performance of the work at the lowest possible figure. The contractors for the sub-branches feel more security in dealing directly with the owner, knowing that they run no risk of having to accept a *pro rata*, that bugbear of the sub-contractor.

The questions involved will, from all appearances, be brought to a test in erection of the latest improvements projected by one of our largest capitalists, and as all parties are ready for the fray, interesting developments may be confidently expected, for both sides seem to be confident of the correctness of their positions, and firm in their intentions to maintain them.



We learn from a telegraphic dispatch published in *The Call*, that the Supervising Architect of the Treasury Department is to visit this city for the purpose of inspecting the site of our long proposed, New Postoffice Building, which of late years seems to have assumed the proportions and characteristics of other Castles in Spain. It is sincerely to be hoped that Mr. Aiken will find the site material and substantial enough to warrant him in beginning the preparations of plans for the building, but nothing short of seeing building operations commenced will ever make the public of San Francisco believe there is any remote future possibility of having a more suitable postoffice building than the tumble-down, rattle-trap of a shanty that has done service for so many decades.

THE MECHANICS' INSTITUTE EXHIBITION.

AFTER a lapse of two seasons the Mechanics' Institute is again being held—with some improvements on the old ones in the way of decoration and arrangement. The ground and gallery plans are arranged in an open and systematic way which conduces to a rapid and exhaustive survey of the whole exhibits by those who come for that purpose and at the same time affords a good *coup d'œil* from all parts of the building for those who come simply to lounge. The exhibit of the Arts relating to Building and Architecture is not as complete as it ought to be and it strikes us that a grouping together of all these Arts in one part of the building and arranged in classes; so that an easy comparison may be made between different materials, patents, etc., of the same description, would be a desideratum; this could evolve into a permanent museum of the Building Arts placed in one corner of the spacious pavilion, always open to the public.

Glancing over the exhibits already installed, we find in the way of building material commencing at the foundations the following:—

A fine exhibit of different sized crushed rock suitable for concrete and other purposes—as well as a part of a wall built of stone from a quarry in San Francisco which makes a fine hard blue building stone and of which the new Golden Gate Park Lodge is being built by Gray Bros., and is especially suitable for Rubble work. Marble is represented by Inyo Marble Company, who present a collection of their beautifully marked marble—good both for building and decoration purposes—while the capacities of terra cotta are exemplified by an East Oakland Terra Cotta works. Marble, granite and other stones as applied to monumental purposes are exhibited by Jones Bros.

In the Hallidee Ropeway—of which there is a large and a small sized model—we have an economical means of transporting building material from their resting place in the earth to place of manufacture, and it allows of development of quarries, mines, etc., in places which otherwise would have to remain undeveloped for years. It seems to us that this might be used to advantage on buildings covering a large area in course of construction for the transportation of brick, mortar and other material from one scene of operation to others.

In the way of miscellaneous articles relating to buildings we notice saws for wood-working machinery by Pacific Saw Manufacturing Company. Building paper, including a

model showing roofing paper applied to a gravel roof, and deadening felt by the Paraffine Paint Co., Asbestos by Joshua Hendy Co., and a paint and its application by the Ferre Elastic Paint Co.

In the matter of heating and ventilating, Wm. Cronan has a very creditable exhibit as well as a model of a patent Ventilated Iron Skylight—all of which is deserving of attention.

In furniture and decoration, there are some very good exhibits, those of Plum and of Fredericks standing out as attractive. Some artistic metal hanging lamps in Oriental style are exhibited by G. Benyard. We miss the always attractive exhibit of Stained Glass by Mr. John Mallon, which had become quite a feature of former fairs but are compensated for it by the extensive and good exhibit of Butterworth & Company.

In plumbing—the Furlong Cement Wash Trays offer a cleanly and durable article. Finally the Patent Swing Window turns up as usual, in what seems to be the most feasible shape yet for locking the sash and for swinging it inwards for washing purposes, including an ingenious method of fixing the inside stop of the frame. This is exhibited by the Surety Window Hinge Co., E. S. Barney, manager.

Coming to the Fine Arts we find Architecture unrepresented—sculpture in a very slight degree and painting in many cases very well. This is not as it should be and we hope before the next exhibition that an effort be made to have the Noble Art of Architecture thoroughly well and systematically represented—an Art in which the public requires to be educated more than in any other for the reason that it is one in which the choice of an architect by a client is made in ignorance more often than in other professions, the people trust to themselves and do without professional advice and in consequence the educated eye has to endure many offences against it. For which reason an exhibit of only the good in architecture should be made in such a popular resort as the Mechanics' Fair. We hope that the Architects and the Chapters may get together and get a good collection of their works at the next exhibition—and that the directors appoint a competent hanging committee.

The other Fine Arts, those of Feeding and Draping the human body, are very well represented and it is a good sign that such important arts are not neglected, for without proper food and clothing we cannot expect to have noble architecture, sculpture or painting.

A VISIT FROM THE SUPERVISING ARCHITECT OF THE TREASURY DEPARTMENT.

WASHINGTON, D. C., Aug. 15.—Now it is the supervising architect's turn to take a junket. A representative of *The Call* had an interview with him to-day concerning the construction of the new postoffice building at San Francisco.

Mr. Aiken is a secretive official, and is careful to give out as little information as possible regarding public works. He keeps himself carefully behind closed doors, and outside of his sanctum stands a guard who has been given strict orders to rigidly exclude newspaper men.

The Supervising Architect is naturally a little bit disgruntled, because of many severe newspaper criticisms of the conduct of his office. He is also nettled because many

influential newspapers advocate a change whereby the plans for Government buildings will be awarded to outside architects, after competitive examination. It is believed that this plan will secure the best talent in the country, and Government buildings of the future may be of architectural beauty, instead of the grand, gloomy and peculiar edifices now in vogue.

Mr. Aiken is quite an independent individual, and takes care that this fact shall become known. When he was seen to-day, *The Call* representative said to him: "The San Francisco people are anxious to know when their postoffice building is going to be commenced. They have been trying for so many years and have met with so many disappointments that they are beginning to feel that it is almost a forlorn hope. But now that the Board of Engineers has reported that the Seventh and Mission streets lot is firm enough to support the structure, they would like to know what is the occasion for further delay."

The architect said: "Yes, I know all about that, I know the whole history of the matter, but we cannot perform impossibilities. There are 125 new buildings to look after, and 480 that have to be patched up continually. We will begin work on the San Francisco postoffice just at soon as possible. Next week I am going to start for San Francisco to make a personal inspection of the premises. Director of Mint Preston will accompany me, and we will stop off at Denver to examine different sites offered for the new mint to be erected there. We will then stop a day or so at Salt Lake, where is to be a new building erected. I will also visit Portland, Or., and may stop on my return at Boise. The two Idaho Senators are involved in a dispute as to the selection of a lot for the new postoffice there, and I may decide that matter myself."

Replying to a question Mr. Aiken said he thought the Seventh and Mission streets lot at San Francisco was all right, but would not state the exact nature of the business that required his presence there. The architect was asked whether or not, in his opinion, the work of construction would be commenced this fall or winter.

"The angel Gabriel can answer that question better than I," he said, "I expect to be back in Washington within thirty-five days from the time I start, and immediately upon my return I expect to begin drawing plans. You must understand that thus far only sketch plans have been prepared, and these have been published. I don't know how long it will take to finish the plans or how long it will be before the work of excavation will be begun."

The Call correspondent suggested there was fear expressed in some quarters that Secretary Carlisle was really responsible for the delay in the construction of the building, as well as other Government works, as he wanted to keep every dollar possible in the treasury in view of the state of finances.

"Yes, I know," replied the architect scornfully; "the people are not discriminating enough to lay the blame where it properly belongs—on Congress."

It was then suggested that California people were inclined to believe that there State was a little too far from the seat of Government; in other words, that they were not "in it," geographically speaking.

"I cannot help what they think," said he. "We will not favor any city because of its proximity, or neglect it by reason of its remoteness. You can wire that to your people."—*The Call*.

WHAT makes life dreary is want of motive.—George Eliot.

REASONABLE SKILL AND CARE.



HE phrase "reasonable skill and care" is so often used in a legal sense, and so much turns upon its meaning in the discharge of the architect's functions, that it may be worth while asking what it implies in the ordinary duties of the practitioner. When an employer claims damages from his

architect for negligence or want of skill, he has to prove by attested witnesses the truth of his allegation, and of course, this is a question of expert evidence. It is not an arbitrary or fixed measure of skill, but sufficient under the circumstances of each case, which varies, as a matter of course. For example, in the design of a hospital, it would be reasonable to suppose that the architect planned his sick-wards on principles that were generally recognized; that the sanitary provisions were sufficient and convenient; that the heating and ventilation were devised upon good models. If he failed in any of these points of plan or provision, he could not be said to have shown reasonable skill. Mr. Brown is a good general house designer, but has had no experience in the planning of a free library. Would it be just to charge him with having failed to carry out the requirements of the committee? Here the question of limited experience might be urged; that the promoters knew beforehand Brown had no experience in building libraries, says *Building News*, and that they could not therefore expect him to exercise a high degree of skill in the design or plan. Such a view of the matter has been held by judges and juries, they holding that "reasonable skill" must be interpreted in a limited sense in such a case. But there is a presumption that every professional man represents himself as possessed of the requisite ability and skill. When an architect is employed to carry out any building, no matter of what description, and he undertakes the work, there is an implied warranty on his part that he is reasonably competent to the task. And this is the general and reasonable view. Mr. Tompkins, the architect, who undertakes to design Mr. Smith a house or a shop, is supposed to bring to his task all necessary knowledge and experience, and on his part Mr. Smith expects all that he has bargained for, and certainly holds Tompkins responsible for any defects in design or negligence in superintending the building. If it were not so, an employer might just as well engage a builder or a foreman of works to carry out what he wants in his own way. In the same manner, a man who was suffering from illness or some malady might save the cost of a doctor's fee by going to an apothecary, and would be himself to blame if by mischance a wrong medicine was given to him. On the other hand, if he went to any registered medical practitioner—whether or not he was a specialist matters little—he would be justified in assuming that his case would be treated with a certain or reasonable amount of skill, or that at least, his competence for the task would be assured him. If it was an eye or throat trouble, the general practitioner would, at least, prescribe safe measures that were generally followed; or, if it was too complex a case, would at once recommend his patient to go to an hospital or consult a specialist. And so the professional architect is presumed to understand the requirements of any particular building he undertakes—so far, indeed, as to protect his client against loss or damage.

One of the frequent charges brought against the architect is that of under-estimating. A client has a right to expect a certain degree of accuracy in the estimate he receives, and

if he prescribes an outside limit of expenditure, he has reason to be dissatisfied if the lowest tender exceeds that limit to any large extent. A reasonable approximation to the actual cost is certainly a question of skill. When the contract sum exceeds, say, by thirty per cent the architect's estimate, it can hardly be said that reasonable skill or care has been exercised, unless of course, as often happens, additions, changes, or alterations have been made during its progress. Estimating is certainly one of those branches of architectural practice about which a certain degree of skill is looked for. The Law Court reports afford ample evidence of what is expected from the architect. No doubt the profession are great sinners in this respect. The exceeded estimate is a common reproach leveled against architects, but that is no reason why they should be content to bear the brunt of a charge which is damaging to their interests, and which in many instances can be avoided. An architect is blamed for many things which are not to be placed to his charge. For instance, he cannot foresee the nature of the soil on which his building is reared. When the digging for foundations is begun, it often turns out that they must be sunk to a greater depth than shown or specified, and expense of concrete or even piling may be incurred. The architect is blamed because he has not foreseen this, and provided for it. His estimate has been based on a superficial examination, or on borings that have been supplied him; these turn out misleading, and his charges are disputed because he neglected to make a more thorough personal examination. In one or two cases cited the architect has failed to recover on this ground. But such charge can scarcely be said to be due to want of skill; it is merely an excusable omission on his part, which may be made up at any time without incurring loss.

Then we have supervision. What is a reasonable amount of supervision will always be a very debatable question, because some people are apt to think that every part of the building should be inspected and approved by the architect; while his notion of his duties is that he gives only a general supervision, and is not responsible for such things as improper bricks in any conceivable situation, or the stone to be laid on its natural bed in every part, nor is he responsible for the laying of drains underground or their proper jointing. The charge of want of skill or negligence may be raised by an irate client in several ways. There may be mistakes in the design in the use of materials, and it is for every architect, in the particular circumstances in which he is placed, to avoid these as far as he can. Want of skill in design is again a question depending on the evidence of experts, which may vary. Conceptions of plan, for example, would be difficult to define in many cases unless there was some glaring omission, or some self-evident want of skill—as, for instance, a hall with inadequate means of ingress and egress, a too-narrow main entrance, cramped or dangerous staircase, a dark corridor. Want of skill would arise if an architect planned a block of offices with windows too small for giving adequate light, or without considering the right of the dominant adjoining owner to obstruct. A court of law will assume, naturally, that it is the duty of an architect to make himself familiar with the law of easements, such as those of light and air and support, as his ignorance of the law may involve his client in serious litigation and loss. Examples of such cases abound in our columns of "Legal Intelligence." Every architect is presumed to know so much law as will be necessary to protect his client's interests. There is no excuse for a professional man in London

or elsewhere if he blunders in not complying with the Building Act or by-laws, and thereby puts his client to needless expense. The law will not excuse him by pleading ignorance of its provisions.

So also with respect to other matters than those directly connected with his profession. There is no excuse for him to plead ignorance of engineering. He cannot plead that he knew nothing of treacherous soils or the substrata of the site if the foundations give way and the building settles, or that it was a technical matter outside the architect's work. If he did not know how to provide for wet sand or clay, or what engineering expedients to adopt, such as piling, or planking, or coffer dams he should have called to his assistance someone who did. Again, if through defective design an iron girder gives way, precipitating a wall, or an iron roof collapses, causing serious injury, it will not do for the architect to exonerate himself and lay the blame on the engineer. If an arch fell in from want of sufficient abutment, as shown by scale on the drawings, the architect would certainly be held liable, and the same if any wall or column proved too weak. Perhaps in questions like ventilation and acoustics there would be more difficulty in proving incompetency. We are not aware that any legal charge of incompetency has been made out against any architect because the ventilation of his building was bad, or because the acoustical properties of a concert or lecture hall were defective. These are matters about which there are conflicting views and theories. It may indeed be affirmed generally that the term "reasonable skill and care" could only be applied to those practical and definite matters relating to building which every architect is supposed to know, and not to questions of any speculative or doubtful kinds, about which opinion would naturally vary. A wide interpretation of the meaning of the phrase would be given by any jury in some cases where, for instance, the complexity of the building or its conditions rendered the architect not altogether responsible, and the phrase would bear a more definite meaning in connection with buildings of ordinary size and every-day use.—*Building News.*

INCREASE OF BUILDING IN THE NEAR FUTURE.

EVERYTHING points to a great increase in building operations in the near future, all over the country. In New York, which, as the centre of business, feels very promptly improved general conditions, the amount of building is already enormous. The number of permits for the erection of new buildings during the past six months, says *The American Architect and Building News*, is almost exactly twice as great as the number issued during the corresponding part of 1894, and the proportion between the intended cost of the buildings for the two periods follows nearly the same ratio. Meanwhile, the number of permits for alterations has not very much increased; showing that the hesitating season of alterations, which usually precedes a time of confident and extensive building, is nearly over, and that New York, at least, is entering on a new era of development. How soon its example will be followed by other cities remains to be seen; but nothing is more certain than that the prosperity of one part of the country means the prosperity of all; and local conditions can only in a slight degree delay or modify the change which building interests have for the last few years looked and hoped for.

THE BLAST AT PENRHYN SLATE QUARRIES.

A SPECIAL correspondent of the London *Times* writes:—Until the afternoon of Saturday, April 27, Y Talcen Mawr was the central point and perhaps the most striking feature of those famous quarries near Bethesda which have been in operation since the reign of Queen Elizabeth, and have changed half the rugged protuberance of the mountain called Bronllwyd into a deep amphitheater. Many thousands of people who have visited the quarries must carry with them a memory of the Talcen. It was a rough slab-sided obelisk of grey rock, with a bold vein of white quartz at the summit. Its height from the bottom of the quarry was about 300 feet, and it was pierced at regular intervals with tunnels representing the level of operations at various periods in the past history of the quarry. At all times this great pillow of green rock presented a picturesque appearance, whether it was viewed from above or below, for the terraces, which the quarrymen call galleries, of purple slate, rising tier upon tier, one upon another, almost to the top of the mountain, formed a singularly effective background. Opinions vary as to the reason why this upstanding fragment of a dyke which ran across the center of the quarry from north to south was suffered to remain, while the dyke itself was cut away on either side; but the better opinion is that a manager of the quarry who flourished at the beginning of the century, not foreseeing the colossal scale upon which the quarry would be worked in the future, hoped that this portion of the green rock might serve as a support for one side of the quarry. But the quarry grew beyond his expectations. The quarrymen cut through the dyke on either side, and left the Talcen in obelisk, which grew more and more picturesque and more and more dangerous every day and every year as the slate rock was cut away deeper and deeper at its base.

It was in August of 1894 that, after a report from the chief agent had caused Lord Penrhyn to make a personal inspection, the Talcen was doomed, and the wisdom of the sentence was proven almost at once by the sudden fall, fortunately in the night of a fragment weighing several tons, which if it had fallen in the day, must have destroyed a large number of quarrymen. From that date till Saturday preparations for the great blast proceeded, and on Saturday the huge pillar, weighing 125,000 tons at the least, was demolished. The spectacle was imposing in the extreme. On the very brow of the quarry, fully 500 yards away from the scene of the coming exploding, and some hundreds of feet above it, a knot of privileged spectators was assembled near a flagstaff. The time was a few minutes past three. All along the brow of the quarry, and up on the slopes of the mountain above were crowds of spectators. All knew that in the bowels of the Talcen were two charges of powder, one of three tons and the other of four tons. At last the decisive moment came. The flag on the brow of the quarry was hoisted. A blue wisp of smoke from the base of the pillar, and all present knew that the triplicate fuses had been lighted, and that the huge bricked-up chambers of powder would do its work shortly. There was a silence of expectation for five minutes or so, an interval which was almost painful; but still the wisp of blue smoke rose lazily, and a little cascade of water on the Bethesda side of the rock fell down merrily. The minutes passed very slowly, but at last—sixteen minutes and a half after the flag had been hoisted—there was a crashing sound. The noise was not so loud as one would have ex-

pected. With it came an outburst from the base of the pillar of smoke, of minute dust and of something that was either flame or red-hot powder of stone. Away from the top of the pillar sped two kestrel hawks which have nested there for many a year. The base of the great rock seemed to fall away as water falls from a fountain jet at its highest point. There was no sign of any stone being thrown to a great distance. Then, in less time than these words occupy in the writing, but in orderly sequence none the less, there was the roar of huge masses of stone rolling one upon another, and with it came the spectacle of the huge rock sinking and subsiding with a slowness that was almost majestic until it was a mere chaotic mass of boulders reeking with smoke, quivering and gliding downwards for many minutes like an avalanche. Another minute followed, and then the whole of the quarry was vested in a cloud of heavy and evil-smelling smoke, of which however, the keen wind made short work.

MR. RICHARD MORRIS HUNT.

THE profession of architecture, not only in this country, but throughout the world, has suffered a great loss in the death of Mr. Richard Morris Hunt, which occurred at his country house at Newport on Wednesday. Mr. Hunt was born at Brattleboro, Vermont, October 31, 1828, of a distinguished family. The sons of this generation seem to have been endowed with artistic talent in a remarkable degree, for a brother, the late William M. Hunt, became one of the most noted painters that this country has ever produced. Richard, while yet a very young man, was sent to Europe to complete his education, and, while there, was taken with a fancy for architecture. With characteristic energy, he prepared himself for entrance into the School of Fine Arts in Paris, remaining there for about seven years, under the great Lefuel. On leaving the School, he travelled extensively, and, returning to Paris, was invited by Lefuel, who was then engaged in building the wings connecting the Tuileries and the Louvre, for the Emperor Napoleon III, to become his assistant. He accepted the invitation, and is reputed, according to the tradition among New York architects, to have designed many of the details of the building, including the entrance archway from the Rue de Rivoli to the court-yard. At this time, Hunt was much more a Frenchman than an American. At the time that he entered the School of Fine Arts, he was, we think, the only American in the School, or, at least, in the Department of Architecture, and he was identified with French architectural design, and French architectural practice, until his work on the Louvre was finished. Returning then to America, he was employed for a time by Dr. Walter on the extension of the Capitol at Washington, and then entered into practice on his own account in New York. Although comparatively rich, both by inheritance and by marriage, he worked assiduously and ardently in his profession, and designed and carried out an immense number of fine buildings. In New York, those which occur to us at the moment are the Lenox Library, on Fifth Ave., the *Tribune* Building, on Printing-house Square, the W. K. Vanderbilt house, on Fifth Ave., the Osborne house, on Park Ave., a hospital near Third Ave., the Marquand house, and many other dwelling-houses, besides several mercantile buildings on Broadway and elsewhere; and the pedestal to Bartholdi's Statue of Liberty; besides the Vanderbilt Mausoleum, on Staten Island, and a large number of monuments. In Newport,

he built many splendid country houses, including the so-called Marble Palace, belonging to Mrs. W. K. Vanderbilt, and the magnificent Golet house, reputed to have cost a million dollars. In Boston, his work is represented by the two Brimmer houses on Beacon street. At Asheville, North Carolina, he was engaged, at the time of his death, in the completion of an immense house for another of the Vanderbilt family. In the assignment of the work for the Chicago Exposition, he was given the principal place, by being asked to design the Administration Building, and all the world knows how he succeeded. Before that time, however, his great talents had long been recognized in the profession. He had been repeatedly elected President of the American Institute of Architects, to whose interests he devoted the most earnest and wise attention, both in office and out of it; and was decorated many years ago with the cross of the French Legion of Honor. Later, the French, who seemed to have followed his career with an affectionate interest, which was fully returned on his part, raised him to the highest honor that could be bestowed on a foreign architect, by making him Corresponding Member of the Institute of France, in the Section of Fine Arts; and similar honor was recently done him on the other side of the Channel, by the Royal Institute of British Architects, in the award of the Royal Gold Medal.—*The American Architect and Building News.*

AN INTERESTING PIECE OF FOUNDATION WORK.

AN interesting piece of foundation-work has been going on in New York, at the corner of Exchange Place and Broad street, where a sixteen-story office-building is to be erected for the John Taylor Johnson estate, says *The American Architect and Building News*. The soil at this point is a stiff clay, mixed with gravel and boulders, and resting on rock, at a distance of about forty feet from the surface. As usual in New York, where such lofty buildings are to be erected in the lower part of the town, caisson foundations are used, but the method of sinking the caissons is novel. Instead of forcing air into them, so that the earth can be excavated under them, the work of sinking them is performed mainly by water-jets, directed in a very ingenious manner. Around the lower edge of the caissons, which are of the usual form, and proportioned in size to the weight which is to come upon them, are fixed hollow castings, each of which is pierced with a row of holes, about one-eighth of an inch in diameter. Pipes, descending on the outside of the caisson, enter the castings, and convey to them water, at a pressure at a hundred pounds or more to the square inch. The water issues in jets from the holes in the castings, washing away the earth from under the edge of the caisson. Around the lower edge of a caisson of moderate size there are something like a thousand of these jets, and their combined effect loosens the earth so effectually as to allow the caisson to sink rapidly. The movement is hastened by loading the top with iron weights, and by exhausting the air from the interior; and it is said that a caisson can be sunk forty feet in about a day, including all the delays incident to testing and rectifying the movement, and riveting together the three sections of which each caisson is made. As might be expected, the sections do not sink with perfect accuracy, and the work must be stopped at intervals to apply gauges, and modify the current through the water-jets, until the necessary correction is made. In

most cases, this is all the rectification required, but when the descending edge of the caisson meets a large boulder, it is sometimes necessary to apply a special treatment, which consists in directing a jet of water upon the earth below the boulder, and a little outside of it. This jet soon excavates a hole, into which the boulder falls by its own weight, out of the way of the descending caisson. After the caissons are sunk to the rock, they are excavated in the usual manner, the surface of the rock trimmed and leveled if necessary, and concrete and masonry put in, filling them to the top. As soon as the concrete has set, the foundation is ready to receive the superstructure. As usual with modern caissons foundations, the steel cylinder is intended to serve only as a form in which to mould the concrete pier, which is the real support of the building, so that the metal may corrode away at any time, after the concrete has set, without diminishing in the least the security of the structure. Compared with the older method of making caisson foundations, the new one, which is the property of the Hydraulic Construction Company, has great advantages in point of rapidity, the sinking of a caisson being a matter of a few hours, instead of several weeks.



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.

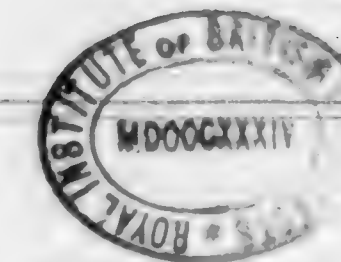
TUDY for a Village Inn, Havens & Topeke, Architects.

I. O. O. F. Building, Redwood City, J. Marquis, Architect.

OUR double plate shows the new building to be erected by Claus Spreckles, on the corner of Third and Market streets, in which *The Call* is to make its home.

SAN FRANCISCO CHAPTER OF THE AMERICAN INSTITUTE OF ARCHITECTS.

AT the August meeting of the San Francisco Chapter of the American Institute of Architects, officers for the coming term were nominated, to be voted for at the annual meeting in September. A full attendance of members is requested at that meeting.





CALIFORNIA ARCHITECT & BUILDING NEWS
SAN FRANCISCO.

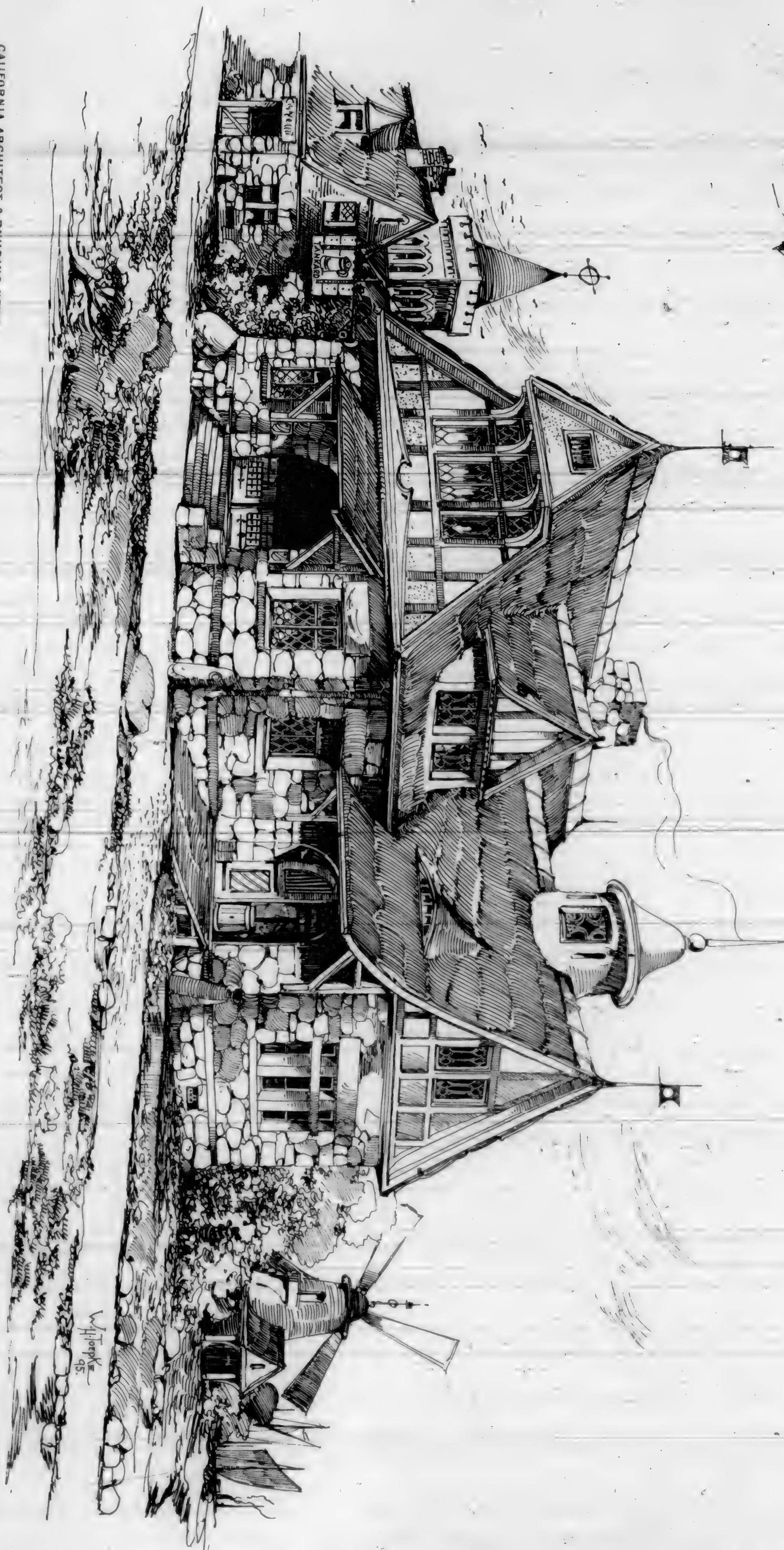
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VOL. XVI No 8 AUGUST 1895.

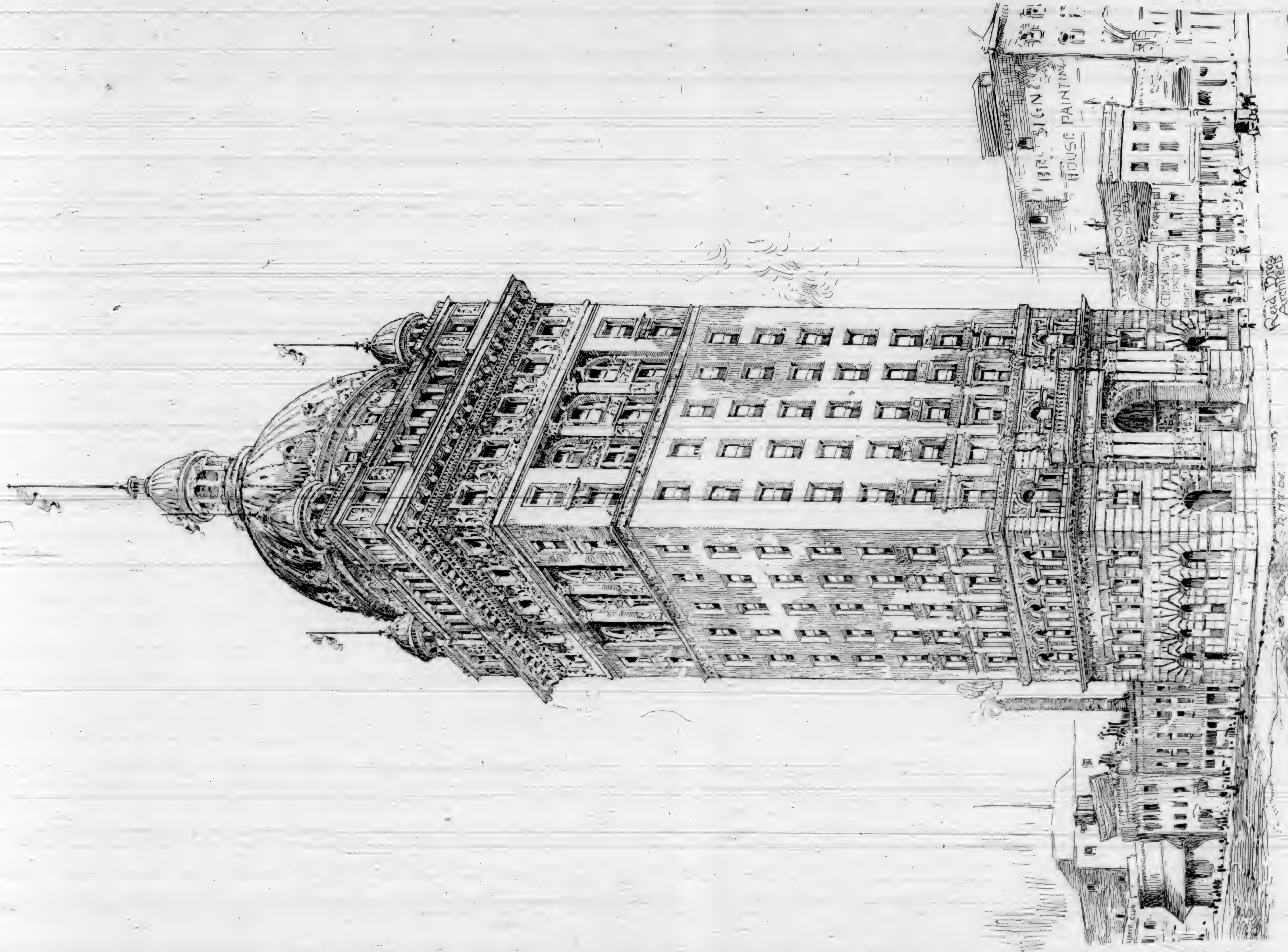
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SAN FRANCISCO

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STUDY FOR A
"VILLAGE INN"
HAVENS & TOEPKE ARCHTS.



CALIFORNIA ARCHITECT & BUILDING NEWS
SAN FRANCISCO.

BRITTON & REY PHOTO LITH.

NOTICE OF MEETINGS.

SAN FRANCISCO CHAPTER, AMERICAN INSTITUTE OF ARCHITECTS, meets second Friday of each month at 408 California street.
 SETH BARSON, Pres. GEO. W. PERCY, Vice-Pres.
 OLIVER EVERETT, Sec. JOHN M. CURTIS, Treas.

SOUTHERN CALIFORNIA CHAPTER AMERICAN INSTITUTE OF ARCHITECTS, meets first Wednesday of each month at 114 Spring street, Los Angeles, Cal.
 OCTAVIUS MORGAN, Pres. A. M. EDELMAN, Vice-Pres.
 ARTHUR B. BENTON, Sec. AUGUST WACKERBARTH, Treas.

TECHNICAL SOCIETY OF THE PACIFIC COAST, meets first Friday of each month at Academy of Sciences Building.
 C. E. GRUNSKY, Pres. GEO. W. DICKIE, Vice-Pres.
 OTTO VON GELDERN, Sec. W. C. RALSTON, Treas.

CALIFORNIA ELECTRICAL SOCIETY, meets the first and third Monday evenings of each month at the Academy of Sciences Building.
 GEO. P. LOW, Pres. C. O. POOLE, Vice-Pres.
 MAX CASPARI, Sec. H. T. BESTOR, Treas.

ARTIFICIAL WEATHERING TESTS OF BUILDING STONES.

A paper by Mr. Lea McL. Luquer in the Transactions of the American Society of Civil Engineers for March of this year raises a question in connection with the tests of building material which we discussed in these columns more than two years ago. As Mr. Luquer observes, the artificial testing of endurance of building stones exposed to the atmosphere, by means of the formation of crystals of some suitable substance in their pores, has for many years come to be regarded as satisfactory, although he raises the question which we pointed out in our former comments on this subject, whether the artificial procedure can be considered equivalent to the natural process of weathering. It is almost certainly not exactly equivalent, but we think it is a question well worth considering whether it is even approximately so. No theoretical considerations are sufficient for the determination of the physical forces developed or the changes produced in the material by them.

It is not impossible that small chemical reactions, at least, may take place in the material of some stones when treated by the sulphate of soda of similar processes, although it is improbable that such effects often result to an appreciable extent. Leaving out of account, however, all such influences, there still remains the fact that the destructive effects produced by the formation of ice in the small interstices of stone are almost certainly not identical with those induced by the formation of the crystals of such chemical substances as sulphate of soda. It may of course be said that while considerable inequality in these results may exist, yet the destructive effects of artificial crystallization may furnish a basis for a comparative or quantitative inference in regard to the weathering capacity of any given material. This is probably true, and the observations would possess practical value were there in existence actual data establishing the desired relation. As a matter of fact no such relation has yet been established for any stones, natural or artificial, and hence the results of artificial crystallization are, to a large extent at least, of suppositive value as establishing probable relative capacities among a given set of stones.

Again, there is a class of weathering effects due to the action of the sun and resulting from alternate expansions and contractions, to say nothing of slow possible chemical

actions, of which no artificial process of crystallization can give us any measure. It is seem, therefore, that the latter class of tests fail in some very material characteristics of furnishing to the engineer such a measure of weathering endurance as he should desire or demand.

We do not make these observations in the line of hyper-criticism, because we recognize the fact that the engineer, like everyone else, must always use the best means at his command to accomplish any desired end, although those means may fall very short of meeting the conditions which he fully recognizes. Mr. Luquer's admirable paper shows conclusively what has been at least partially recognized before—viz., that the sulphate of soda process is much more severe in its effects on the considerable number of stones which he tested than the same number of alternate freezings and thawings, and to an extent which varies widely with stones of different texture. While, therefore, the sulphate of soda and similar processes may and do give valuable information to the engineer in regard to certain weathering properties, and while such tests must necessarily in some cases be the only endurance tests available, their results should in all possible cases be supplemented by the effects of actual weathering exposure wherever possible. Indeed it is probable that there is no better measure of resistance to weathering by building stones, when available, than that exhibited by the outcrop of the quarries which have been exposed to all weathers and all seasons through perhaps centuries of time. On account of the varying qualities of stone in the same quarry this test is obviously unusually unavailable, but engineers with a very little forethought and trouble may accumulate in the course of a few years data in regard to the weathering properties of natural and artificial stone of a most valuable character by submitting specimens to continuous exposure under such conditions as will develop effects of sun, frost, and other influences which act on the exposed faces of buildings. The accumulated data of such investigations as that of Mr. Luquer, and others of a similar character, would then perhaps in time give us the desired relation between the artificial and natural methods. In the meantime provisional methods must be employed for what they are worth, but with caution, in the hope that both architects and engineers may give the subject much more attention than it has yet received.—*The Engineering Record*.

THE STONE-WORKER'S FUTURE.

IN looking forward to the probable developments of the next few years it appears to one who has personal contact with the pulse of invention, that we will make very great strides in the perfection of stone-working machinery of an entirely new type. There are, as it were, periods or waves of improvement. The pneumatic tool marks one of these waves, being one of the inventions that stamps its character upon every class of the industry. It marks an era in the craft. The time is fast approaching when we will feel another wave of progress, and it will also make its mark upon every class of the craft.

But a ten minutes walk through a modernly-equipped stone works reveals to the thoughtful mind, many places where both labor and time are wasted, and are unproductive. And as competition becomes more severe labor and time are the great items upon the expense side of the ledger, and anything that tends to save these becomes a chief factor in a successful business enterprise. Only a week or two

ago I had a long and interesting talk with the owner of one of the oldest and most important steam stone works of New York City, and the conversation turned mainly upon this very theme, the mechanical saving of labor and time in the dressing of building stone. When he was young in the business, good work was all that was needed to fill up a fat order book, but now it requires a close cost estimate. And this is truer as the years pass by.

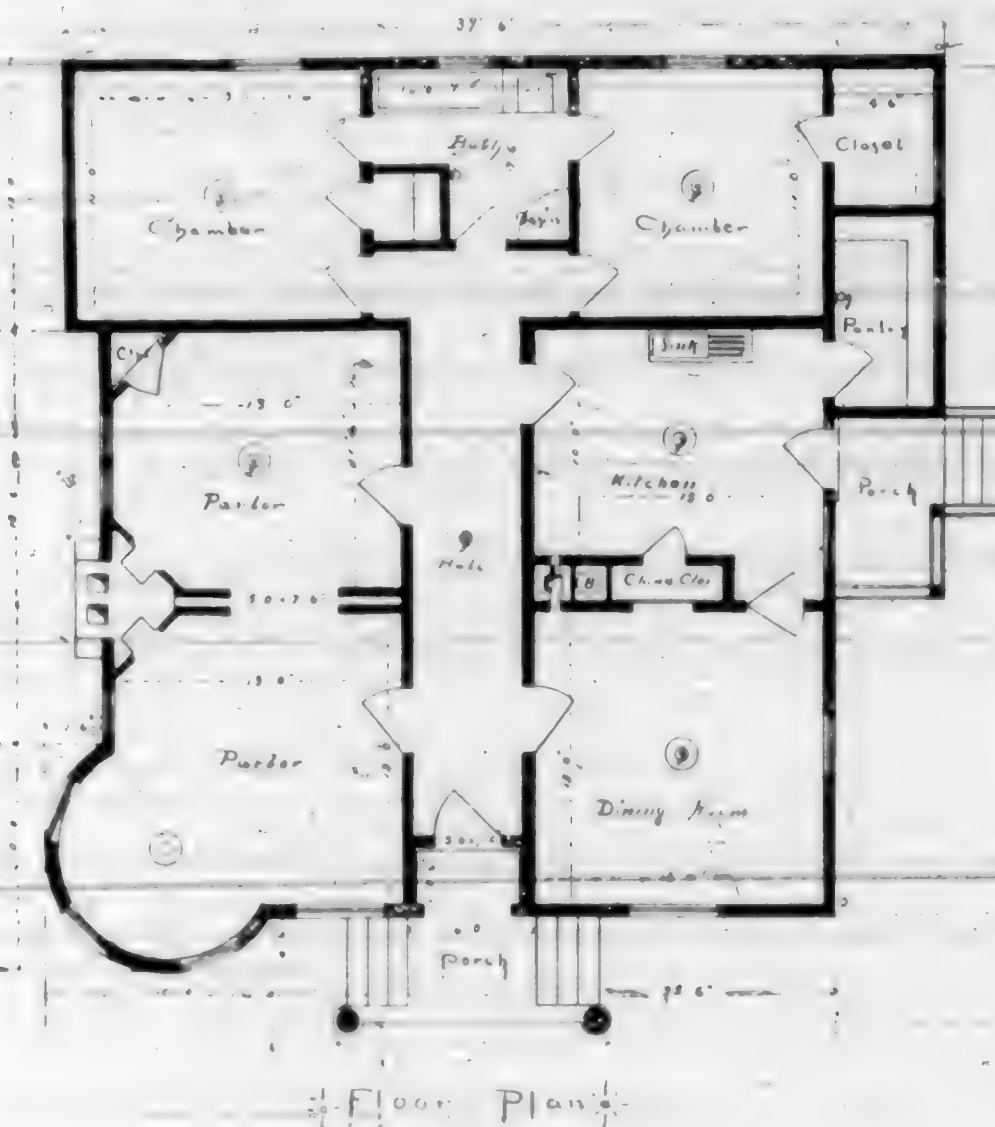
In the first place, it occurs to a practical mind that the cutting of stone as it is done now is entirely too slow a process. And the machinery is too expensive by all means. From five to ten thousand dollars is entirely too much to spend for a saw cutting little more than a quarter of an inch per minute. Again, dimension work must be put through faster. The cuts should follow rapidly, and the measurements be made by mechanical means. Cutting and trying is a relic of the days when carpenters hewed beams with adzes. Measuring and squaring should be absolutely under

BOOKS AND PERIODICALS.

We have before up the Catalogue of the EIGHTH ANNUAL EXHIBITION of the Chicago Architectural Club Art Institute, Chicago, May 23d to June 10, 1895. Among other illustrations is the competitive design for the gold medal of the Illinois Chapter A. I. A. by J. W. Johnson.

This Catalogue is neatly printed on good paper, many of the sketches are very creditable to the artist, and show that the club is doing good work in the cause of Art.

A new magazine called GRANITE PRODUCER AND BUILDER, devoted to the interests of quarries, manufac-



Country Cottage Price \$2500.00



J. J. & T. D. NEWSOM, ARCHITECTS.

mechanical control. Gang work should be done at high speed. Planers must work faster and be automatically operated. Tools must be invented to do special work automatically from pattern, and without waste of stock. I expect to soon see arches cut without any waste of material within the segment.

In fact there are great lessons for the worker in stone to learn. Some of them can be found in any well-equipped wood-working shop, and in machine shops. Is there any reason why the same principles cannot be applied to the working of stone? It is not because stone is heavy, for in the Washington Navy Yard I have watched the handling of a hundred ton cannon with as much ease as though it were a Napoleon. Steel is as hard as granite. The real secret is that the inventive mind has not taken hold of the entire problem as yet. The rapid manipulation of stone will be a fact when proper attention is focused to that end. *Edw. C. Weaver in Stone.*

A WEAK mind is like a microscope, which magnifies trifling things, but cannot receive great ones.—*Chesterfield.*

turers and sculptors of granite and marble as used for monumental or building purposes. This magazine appropriately dressed in a granite color cover is published by Ladd, Hunt & Co., 131 Devonshire street, Boston, Mass.

It contains some handsome illustrations, among the number a panel carved in granite that makes a very striking figure, we should judge it must be a valuable work for those interested in this line.

COMPRESSED AIR and the Clayton Air Compressors, complete catalogue No. 8, Havemyer Building, Cortlandt, Church & Dey-Sts., New York; it is not our custom to review trade catalogues, but make an exception in this case because of a valuable article upon "The Wide Use of Compressed Air" which the volume contains, calling attention to the many uses that at the present time compressed air is applied to that cannot fail to be of interest to constructing engineers.

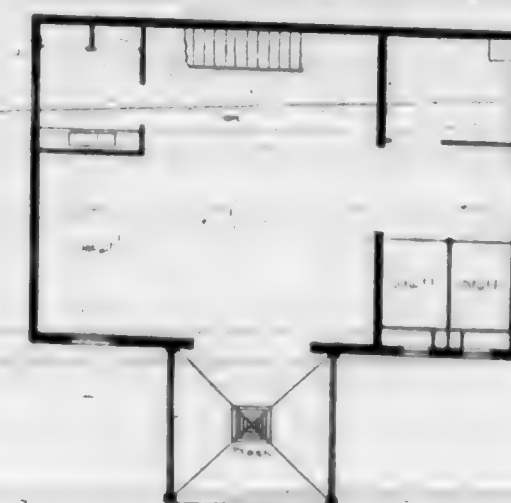
PAINTING IRON BRIDGES is by Walter G. Berg instead of Walter G. Bery.

LEGAL DECISIONS.

From a large number of Legal Decisions of the higher Court, of the different States of the Union, we select and publish in this column, such as appear applicable to this section of the country.

WHEN ORDER OF CONTRACTOR TAKES PRECEDENCE OF LIEN.—An order given by the contractor on the owner in good faith, and for a valuable consideration, before notice of a material man's lien is given, takes precedence of such lien. *Newman v. Levy*, Supreme Court, General Term, Second Department, 32 N. Y. Sup. Rep. 557.

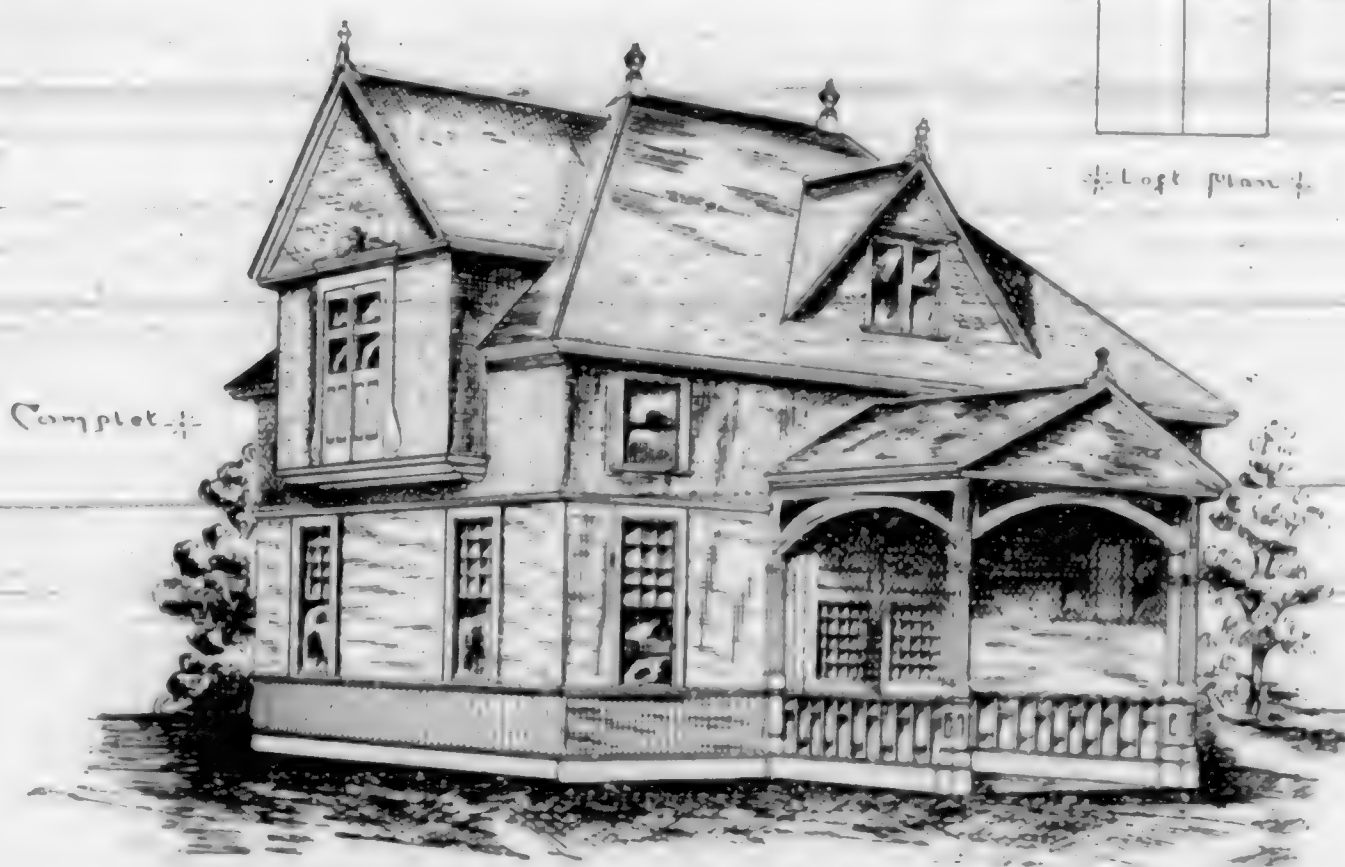
STATEMENTS OF CONTRACTOR'S SON.—A statement by a contractor's son, while working for his father, in the latter's absence, that the time for filing a mechanic's lien for certain work had expired, does not bind the father, where the son was not authorized by him to make the statement. *Alexandria Bldg. Co. v. McHugh*, Appellate Court of Indiana, 39 N. E. Rep. 877.



Ground Plan

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J. J. & T. D. NEWSOM, ARCHITECTS.

ACCEPTING SERVICE OF NOTICE.—In proceeding by the original contractor to enforce a mechanic's lien against the owner of the land, no rights of subsequent purchaser intervening, the owner by accepting service of a copy of the statement in lieu of the statutory service, before the time had elapsed within which the statutory service could have been made, is estopped to assert that the service was not made in the statutory manner. *Mount v. Fisher*, Supreme Court of Michigan, 62 N. W. Rep. 338.

IRON BUILDING CONSTRUCTION.—The thirteenth claim of the Buffington patent, for "improvements in iron-building construction," being "the combination, with the posts and girts, of the angle plates connecting them, and forming supports for the veneer shelves," does not include a claim for the idea of supporting horizontal sections of masonry veneer on the iron framework of a building, or the combination of such veneer and the shelves supporting it with the iron frame, merely because shelves and veneer supported thereon in horizontal sections are described in the specifications of the patent. *Buffington's Iron Bldg. Co. vs. Eustis*, Circuit Court of Appeals, Eight Circuit, 65 Fed. Rep. 804.

NO LIEN FOR DAMAGES FOR BREACH OF CONTRACT.—Under the laws of New York, a contractor has no lien for damages sustained by him by reason of a breach of contract by the owner, but is confined to the value of his labor and the materials furnished. *Wolf v. Horn*, Com. Pl. N. Y. City, 33 N. Y. S. Reporter, 173.

MEASURE OF DAMAGE FOR FAILURE TO COMPLETE CONTRACT.—When a contractor fails to complete a building, and the owners take possession and do so, the measure of damages will be the amount of the paid contract-price, less the fair and reasonable amount the owner had to pay to complete the work. *Mills v. Paul*, Ct. Civ. App. Tex., 30 S. W. Reporter, 559.

ARCHITECT'S LIEN FOR PREPARING PLANS, ETC.—The Circuit Court of the United States (Northern Dist. Ohio,) has decided that a statute giving a lien to a person "who performs labor or furnishes machinery for erecting, altering, repairing or removing a house by virtue of a contract," etc., includes not merely those performing manual labor, but extends to the labor of an architect in preparing plans and specifications, and in superintending construction, where it appears that such plans and specifications were prepared with a view to the particular location where the building was actually located, and in pursuance of a contract having a substantial financial basis. The Judge said: "There is no reason in equity or law why the architect who conceives and puts upon paper the design of such an immense building as that involved in this case, and who puts

upon paper with such minuteness of detail the specifications and drawings as to enable any one skilled in such business to erect, with perfect proportions and proper stability, such a mammoth structure, should not be protected in his contribution to the completion of such work, as well as the carpenter, the plumber, the painter, or any one who performs manual labor.

"The Court ought certainly not to strain the statute to exclude labor of this high character and grade, unless it is plainly the intent of the legislature that it should bear such interpretation. The architect in this case is entitled to a lien not only for the plans and specifications, but for the labor and assistance in the construction of the building in pursuance of these plans." *Phoenix Furniture Co. v. Put-in-Bay Hotel Co.*, 66 Fed. Rep. 635.

ATTORNEYS' FEES FOR SECURING LIEN.—The Supreme Court of Montana holds that: A law providing that in an action to enforce mechanics or other liens, the party if successful shall recover a reasonable attorney's fee and costs is constitutional. *Helena Steam Heating & Supply Co. v. Wells*, 40 Pac. Rep. 78.

OCCUPATION TAX ON ARCHITECTS.—Acts 1883, imposing an occupation tax on architects, was not repealed by Acts 1889, or by Acts 1891, both of which provided for state and county revenues. The occupation of an architect can be made the subject of a privilege tax. *Cook v. City of Memphis*, Supreme Court of Tennessee, 30 S. W. Pap. 742.

BUSINESS MOSAICS.

Rock Asphalt—In another part of this issue will be found an advertisement of a quantity of the celebrated and widely known Neuchatel Rock Asphalt Mastic, which is so extensively used in New York, Chicago, and all the other large Eastern cities, as well as in Europe, for laying side walks, fire-proof floors, etc. It is peculiarly adapted for water tight floors in stables, sanitary cellars, and for other similar work, and anyone desiring an article that will meet their requirements for the above purposes cannot do better than by using this asphaltum.

The lot now offered for sale is the genuine product from the Neuchatel Valley, Switzerland, and is the balance of a shipment received here some time ago, but parties ordering having failed, it has been held in store pending sale. Owners having determined to dispose of this balance at an early date, have now authorized their representatives here, Messrs. Williams, Brown & Co., 116 California St., to make a specially low figure to that end. The attention of all in the trade is drawn to this article as the cheapest and best for the purposes above stated.

Wife—"Dear, dear! What can you be dropping oil on your best coat for?" **Husband**—"I bought a bottle of stuff to-day to take out grease stains with, and I wanted to see if it was any good."—*News Letter*.

As the windy season is almost over it is time to think of having your house repainted, therefore a few facts about paints do not come out of place. The Phoenix pure paint, manufactured by W. P. Fuller & Co., is certainly an article that fills the bill; its extensive use upon the Pacific Coast for the last five years proves that it is what is claimed to be by the manufacturers. Without pure materials how can you expect good work? Note what is guaranteed: "Absolutely pure and satisfactory on the building or we will replace it with any material the architect may select."

New Customer—"Is that your dog?" **Barber**—"Yes, sir." **New Customer**—"He seems very fond of watching you cut hair." **Barber**—"It is not that, sir. Sometimes I make a mistake and take a little piece of a gentleman's ear."—*Tit-Bit*.

The fact that cement has been gaining in favor for foundations, sidewalks, etc., is self evident to every one interested in the welfare of our city. When you order cement why not order the best, to this end why not order from W. R. Grace & Co., 203 California street, you will certainly be satisfied with "Josson" or "White Starr," but as you pay your money you can take your choice of many other brands they have on hand.

"What a talker Mrs. Frakshus is!" exclaimed Mrs. Dinwiddie. "Yes," replied Mr. Dinwiddie; "even her teeth chatter."—*Life*.

A. Steiger Sons.—This concern has proved itself fire proof, for notwithstanding the destruction of their works by fire, business has been continued with renewed energy, any thing in the way of Architectural Terra Cotta, etc., will be found in stock, or manufactured to order. Orders can be left at the office in San Jose, Postoffice Box 1025, San Francisco office, Builders' Exchange, Post street, room 16.

Heating and Ventilation, 27 New Montgomery street. Mr. Wright having purchased his partners interest will continue to furnish estimates for the heating and ventilation of buildings of any size, either by steam, hot water, warm air, or by combination of hot water and warm air. As the importance of good ventilation, combined with a comfortable heat is daily becoming more in use, people desiring pure air are more inclined to pause before ordering a hot air furnace, the right thing to do is to consult some one who makes a business of this art, surely it is an art; Mr. Wright is the man to apply to. Judge Murphy might not now be on the sick list, if Mr. Wright had ventilated the Court Room.

Mr. Brice must have lost his hat. He is now talking through his secretary.—*Cleveland Leader*.

If you need water only when the wind blows; if you are satisfied to utilize but a small fraction of the water in your well, if you prefer heavy bills for repairs after each storm in winter, by all means use a windmill; but if you want water at any time, and up to the full capacity of your well, put in the Ajax Coal Oil Gas Engine, the latest thing in mechanics, an engine that uses common coal oil for fuel, and is built by the well known firm of Palmer & Rey, San Francisco, Cal.

He—"My views of bringing up a family are— SHE—"Never mind your views; I'll bring up the family; you go and bring up the coal."—*Halifax Herald*.

San Francisco Lumber Co., wholesale and retail; the readers should be reminded that their principal office has been removed to the foot of Third street, uptown office for orders 405 Montgomery street, cor. California. The yards, foot of Third and Channel streets south side bet. Fourth and Fifth streets, contain almost everything the contractor and builder may require, the fact that Mr. J. N. Curtis is manager is enough to insure fair treatment and prompt delivery of orders.

The Teacher—"Now, who can tell me which travels the faster, heat or cold?" **Johnnie Bright** (promptly)—"Heat, of course. Anybody can catch cold."—*Pathfinder*.

W. W. Montague & Co. is the place to go, if you wish anything in the way of mantels, grates or tiles. Before you leave their establishment it will be well to look over the large stock of most everything in the way of heating apparatus; it may be hard to make a choice among so many desirable articles that add to the comfort of house-keeping, but when you leave the store you will go with the idea that San Francisco has establishments equal to any other city.

Architect's Wife—"What makes you so bad tempered to-night, John?" **Architect**—"I don't know; unless it is because I was drawing some cross-sections this afternoon."—*Drake's Magazine*.

The Improved Chapman Fire Hose Real is what you want if you want the best. At 14 and 16 Fremont street you will find Mr. R. S. Chapman, late Fire Surveyor for Board of Underwriters, what he doesn't know about hose is not worth knowing. Call and be convinced.

CITY BUILDING NEWS.

All work for schooner for the American Board of Commissioners for Foreign Missions; architect, Hugo P. Frear; contractor, Geo. W. Knass; signed, July 3; filed, August 2; cost \$4250.

Bartlett near 22d. To build; owner, M. J. Dempsey; contractor, H. Munster; signed, July 20; filed, July 25; cost \$2400.

Belvedere near Fredrick. To build; owner, W. Hinkle; architects, Hermann & Swain; contractors, Peterson & Person; signed, Aug. 8; filed, Aug. 9; cost \$3075.

Bluxome near Fourth. To build; owner, J. F. Hill; architect, E. A. Garin; contractor, D. R. W. Smith; cost \$4000.

Bluxome near Fourth. Stable buildings; owner, Overland Freight and Trans. Co.; architect, S. O'Brien; contractor, M. Bagey; cost \$1800.

Brannan near Fourth. To build; owner, A. Steinmetz; contractor, W. Bell; cost \$900.

Brannan near Fifth. Mason work, etc., on brick warehouse; owner, Ed. Niehaus; architect, B. J. Clinch; contractor, J. Wagner; signed, July 13; filed, July 15; cost \$2500.

Brannan near Fifth. Furniture factory; owner, C. Reichling; contractor, C. Klein; cost \$2000.

Brannan near Fifth. To build; owner, F. Huber; contractor, F. W. Steinmann; cost \$2000.

Brannan near Fifth. To build; owner, R. Herring; contractor, M. J. Gallagher; cost \$2000.

Brannan near Fourth. To build; owner, Herman Harms; architects, Martens & Coffey; contractor, J. Bucher; signed, Aug. 6; filed, Aug. 7; cost \$7250.

Bryant near Tenth. Engine House; owner, City of San Francisco; contractor, W. H. Wickersham; cost \$5945.

Bryant near Centre Place. Alterations and additions; owner, Jas. Mahoney; architect, J. E. Kraft; contractor, P. J. Brennan; signed, July 22; filed, July 24; cost \$1395.

Bryant near 23d. Cottage; owner, Bessie J. Hetzer; architect, Hermann & Swain; contractor, R. Jacks; signed, July 16; filed, July 16; cost \$1582.25.

Bryant near Fifth. Brick building; owner, John Horstmann; architect, H. Gellfuss; contractors, Miller & Beck; signed, July 17; filed, July 17; cost \$3695.

Bryant near Fifth. Carpenter and iron work; owner, John Horstmann; contractors, Hood & Watson; signed, July 17; filed, July 17; cost \$4675.

Broadway near Gough. To build; owner, Mrs. Maggie Hockstadter; architect, M. J. Lyon; contractor, R. Sinnott; filed, July 24; signed, July 24; cost \$6200.

Bush near Laguna. Mill work on church; owner, Congregation Ohabae; architect, M. J. Lyon; contractor, H. Rohling; signed, July 3; filed, July 18; cost \$2000.

California and Montgomery. Iron work; owner, Cal. Safe Deposit & Trust Co.; architect, H. A. Schulze; contractors, Union Iron Works; signed, June 24; filed, July 13; cost \$17174.

California and Montgomery. Boilers, engines, etc.; owners, Cal. Safe Deposit & Trust Co.; architect, H. A. Schulze; contractors, Risdon Iron & Locomotive Works; signed, June 24; filed, July 13; cost \$3800.

California and Montgomery. Sidewalk lights; owner, Cal. Safe Deposit & Trust Co.; architect, H. A. Schulze; contractors, Keatinge, Leonard & Co.; signed, June 5; filed, July 27; cost \$3630.

California and Baker. To build; owner, Kate A. Adams; contractor, W. W. Rednall; signed, Aug. 2; filed, Aug. 3; cost \$3575.

Caselli Ave. To build; owner, J. A. Bigger; contractor, Josiah J. Rose; signed, July 31; filed, Aug. 3; cost \$1420.

Chattanooga St., No. 12. Additions; owner, P. Coughlan; contractor, T. C. Cochrane; cost \$1000.

Cherry near Sacramento. To build; owner, P. A. Peshon; architect, August Lund; contractors, Dahlberg & Lund; signed, July 20; filed, July 22; cost \$3500.

Cliff House. Enclosing porches with glass; owner, Adolph Sutro; contractors, Campbell & Pettus; signed, July 25; filed, July 25; cost \$2770.

Cliff House. Extra floor in attic; owner, Adolph Sutro; contractor, Campbell & Pettus; supplement to contract filed April 13; cost \$420.

Cliff House. Diagonal boarding; owner, Adolph Sutro; architects, Colley & Lemme; contractors, Campbell & Pettus; cost \$1661.

Clipper near Sanchez. Cottage; owner, Geo. S. and Annie Knowles; architect, R. J. Welsh; contractor, J. W. Coburn; signed, Aug. 7; filed, Aug. 8; cost \$1875.

Colma Creek. Excavations, etc.; owner, Spring Valley Water Works; architect, Chief Engineer of Co.; contractor, A. E. Buckman; signed, Aug. 9; filed, Aug. 9; cost 9 cts. per cubic yard.

Diamond near 17th. To build; owner, Andrew Norin; architects, Hermann & Swain; contractor, R. Frost; signed, July 17; filed, July 17; cost \$1750.

Dolores near 25th. To build; owner, J. M. Robinson; contractor, Chas. Koebig; signed, July 17; filed, Aug. 2; cost \$3150.

Fell near Pierce. Alterations; owner, C. Westphal; architect, A. C. Lutgens; contractor, A. G. Johnson; signed, July 24; filed, July 25; cost \$3158.

Fell near Gough. To build; owner, Peter Kelly; architect, W. H. Armitage; contractors, Wheeler & Perry; signed, Aug. 2; filed, Aug. 5; cost \$3925.

Fourth and Freelon. To build; owner and architect, O. W. Kenitzer; contractor, Adam Miller; cost \$4000.

Fourth near Brannan. To build; owner, H. Goecken; architect, H. D. Mitchell; contractor, Geo. Lack; signed, July 20; filed, July 23; cost \$4550.

Fourth street, No. 610. To build; owner, A. Robins; contractor, L. Westerlund; signed, July 31; filed, July 31; cost \$2630.

Fourth near Bluxome. To build; owner, A. Roberts; contractor, Westerlund; cost \$2000.

Fourth near Welsh. To build; owner, M. Dallner; contractor, R. Rechenback; cost \$800.

Fourth Ave. near Point Lobos. To build; owners, T. Morrow and wife; contractor, P. Fredriksen; signed, Aug. 6; filed, Aug. 9; cost \$1250.

Geary near Hyde. Alteration except plumbing and painting; owners, Annie and Katie M. Butler; architect, J. T. Kidd; contractors, Cannan & Mooney; signed, Aug. 5; filed, Aug. 6; cost \$3112.

Hampshire near 10th. Stable; owner, City of S. F.; architect, C. R. Wilson; contractors, Doyle & Sons; cost \$12,875.

Howard near 9th. To build; owner, E. Champin; architect, R. A. Herold; contractor, E. Pienop; signed, July 30; filed, Aug. 1; cost \$5275.

Jackson and Webster. To build; owner, T. J. Tickenor; architects, Mahoney & Ryland; contractor, J. J. Dunn; signed, Aug. 7; filed, Aug. 8; cost \$1250.

Jones and Sutter. Five-story brick; owner, Dr. M. Herzstein; architect, M. J. Lyon; contractor, Wm. Knowles; signed, July 27; filed, July 31; cost \$25,500.

Locust near Sacramento. To build; owner, D. T. McArthur; contractor, C. Zwielerin; signed, July 23; filed, July 24; cost \$9400.

Market near Spear. Brick building; owners, Macdonough Estate; architect, H. A. Schulze; contractors, Mahoney Bros.; cost \$15,000.

Market near Fifth. Electric light wiring; owner, Mrs. A. M. Parrott; architects, Pissis & Moore; contractor, E. H. Frost; signed, July 24; filed, Aug. 5; cost \$32,925.

Market near Fifth. Filing gates, etc.; owner, Mrs. A. M. Parrott; architects, Pissis & Moore; contractors, Coppetters & Moeckel; signed, Aug. 5; filed, Aug. 6; cost \$9.45 per running foot, about \$12,000.

Market near Fifth. Elevators, etc.; owner, Mrs. A. M. Parrott; architects, Pissis & Moore; contractors, Coppetters & Moeckel; signed, Aug. 1; filed, Aug. 5; cost \$5400.

Market near Stockton. Alterations and additions; owner, I. Magnin; architect, A. J. Barnett; contractors, Ackerson & Paterson; signed, Aug. 6; filed, Aug. 6; cost \$150.

Market near Powell. Brick building; owner, Claus Spreckels; architects, Reid Bros.; contractor, C. Ferris; signed, July 10; filed, Aug. 2; cost \$8600.

Market near Powell. Carpenter work on brick; owner, Claus Spreckels; architects, Reid Bros.; contractor, J. W. Hunsbrough; signed, July 15; filed, Aug. 2; cost \$5300.

Market near Powell. Pressed brick and terra cotta work; owner, Claus Spreckels; architects, Reid Bros.; contractors, Gladding, McLean & Co.; signed, July 12; filed, Aug. 2; cost \$3270.

Market near Powell. Plumbing, etc.; owner, Claus Spreckels; architects, Reid Bros.; contractor, W. F. Wilson; signed, July 10; filed, Aug. 2; cost \$1065.

Market near Powell. Plastering; owner, Claus Spreckels; architects, Reid Bros.; contractor, Thos. Mannix; signed, July 23; filed, Aug. 2; cost \$1085.

Market near Powell. Roof and iron work; owner, Claus Spreckels; architects, Reid Bros.; contractor, Philip Hammond; signed, July 10; filed, Aug. 2; cost \$9575.

McAllister near Hyde. Carpenter work and plastering; owners, California Bible Society; architect, McDougall & Son; contractor, J. H. McKay; signed, July 20; filed, July 20; cost \$20,490.

McAllister near Hyde. Brick, stone and terra cotta work; owners, California Bible Society; architects, McDougall & Son; contractor, M. McGowan; signed, July 20; filed, July 20; cost \$9889.

McAllister near Hyde. Concrete foundations; owners, California Bible Society; architects, McDougall & Son; contractors, Gray Bros.; signed, July 20; filed, July 20; cost \$5329.

McAllister near Hyde. Plumbing and gas fitting, etc.; owner, California Bible Society; architects, McDougall & Son; contractor, H. Williamson; signed, July 20; filed, July 20; cost \$2012.

McAllister near Hyde. Painting, graining, etc.; owner, California Bible Society; architects, McDougall & Son; contractor, W. T. Beck; signed, July 20; filed, July 20; cost \$820.

Montgomery near Green. To build; owner, G. Capurro; architect, E. Depierre; contractor, A. Norton; signed, July 16; filed, July 18; cost \$6415.

Moss near Howard. To build; owner, J. Saunders; architect, D. C. Coleman; contractor, J. Kenealy; signed, July 12; filed, July 18; cost \$2775.

Natoma near 5th. Brick building; owner, Louis Dipery; contractors, J. B. Gonyeau & J. Miron; cost \$1200.

New City Hall. Steel work for tower; owner, City of San Francisco; architect, Frank T. Shea; contractors, Fennell & Son; cost \$7396. Corrugated iron, work, contractor, J. H. McKay; cost \$2340. Terra cotta, etc.; contractors, Gladding, McLean Co.; cost \$2025. Shelving in Law Library; contractor, W. G. Hughes; \$894.

Oak near Scott. To build; owner, D. F. Shea; architect, J. J. Clark; contractor, Holm & Sheibley; signed, July 24; filed, July 29; cost \$4807.

O'Farrell near Octavia. Carpenter work; owner, Geo. Haas; architect, J. H. Littlefield; contractor, Robert Smilie; signed, July 11; filed, July 17; cost \$5620.

O'Farrell near Octavia. Plumbing; owner, Geo. Haas; architect, J. H. Littlefield; contractor, H. Williamson; signed, July 11; filed, July 17; cost \$1085.

O'Farrell near Stockton. Alterations and additions; owner, Hyman Bros. Co.; architects, Percy & Hamilton; contractors, Ingerson & Son; signed, July 31; filed, July 31; cost \$1595.

Pacific near Jones. Engine house; owner, City of San Francisco; architect, C. R. Wilson; contractor, W. H. Wickersham; cost \$14,948.

Perry near Third. To build; owner, J. J. Cass; contractor, A. Klahr; signed, Aug. 3; filed, Aug. 5; cost \$2320.

Pennsylvania Ave. near Colusa. Cottage; owners, Chas. H. & Gesine Kaster; architect, D. C. Coleman; contractor, John T. Coleman; signed, Aug. 4; filed, Aug. 6; cost \$1400.

Pierce near Union. To build; owner, G. E. Thompson; architects, Martins & Coffey; contractor, James Mooney; cost \$2495.

Pine and Steiner. To build; owner, Mrs. E. M. Stewart; architect, C. J. Colley; contractors, Dunford & Kronnick; signed, Aug. 2; filed, Aug. 3; cost \$5322.

Power House. Engines and boilers, etc.; owner, Sutro R. R. Co.; architect, J. C. H. Stut; contractors, Fulton Engineering Works; signed, July 30; filed, Aug. 1; cost \$36,398.

Post and Powell. Alterations and additions; owner, G. F. Davis; contractors, Robinson & Gillespie; cost \$5000.

Polk street No. 1217. Additions; owner, S. B. Denkspiel; contractors, Robinson & Gillespie; cost \$1200.

Sacramento near Gough. To build; owner, M. G. Weed; architect, Reid Bros.; contractors, W. S. Veitch & Bro.; signed, July 18; filed, Aug. 2; cost \$3328.

Sacramento and Laguna. Carpentering, plastering, etc.; owner, H. L. Hill; architect, W. J. Mathews; contractor, J. A. Smilie; signed, July 23; filed, July 27; cost \$10,775.

Sacramento and Laguna. Concrete and cement; owner, Horace L. Hill; architect, W. J. Mathews; contractors, Keatinge, Leonard & Ransome; signed, July 22; filed, July 26; cost \$1000.

Sanchez and 22d. To build; owner, L. Bergerat; architect, G. A. Berger; contractors, Klein & Elckholt; signed, July 31; filed, Aug. 2; cost \$2160.

Second Ave. near Clement. Cottage; owner, Geo. F. Lyon; contractor, W. W. Rednall; signed, Aug. 8; filed, Aug. 9; cost \$2100.

Steiner and Grove. Carpenter work; owner, E. Probert; architects, Pissis & Moore; contractors, Gardner & Boyden; signed, July 3; filed, July 17; cost \$5621.

Steiner and Grove. Plumbing; owner, E. Probert; architects, Pissis & Moore; contractor, Ickelheimer & Bro.; signed, July 3; filed, July 17; cost \$1137.

Steiner near Oak. To build except plumbing; owner, Mary A. Fuller; architect, Shen & Shen; contractor, R. Trost; signed, July 13; filed, Aug. 6; cost \$3723.

Seventeenth near R. R. Ave. To build; owner, Henrietta Warsdale; contractor, Marcuse & Remmer; signed, July 18; filed, July 20; cost \$1475.

Sixteenth near Valencia. To build; owner, Mary Hermann; architect, H. Hess; contractors, Weirotch & Franz; signed, July 31; filed, July 31; cost \$9,300.

Stockton and Francisco. Engine House; owner, City of S. F.; architect, C. R. Wilson; contractor, W. H. Wickersham; cost \$14,948.

Sutter and Grant Ave. Additional story; owner, Macdonough Estate; architect, A. Page Brown; contractors, Mahoney Bros.; cost \$10,000.

Third Ave. near Lake. Cottage; owner, G. S. Conroy; contractor, B. J. Taylor; signed, July 19; filed, July 22; cost \$1650.

Twenty-second near York. Cottage; owner, Rose Lafee; contractor, J. Kenealy; signed, Aug. 7; filed, Aug. 9; cost \$1050.

Twenty-third near Noe. Cottage; owner, Peter McDevitt; contractor, W. W. Rednall; signed, July 16; filed, July 16; cost \$1100.

Twenty-third near Noe. To build; owner, Mary McDevitt; contractor, W. W. Rednall; signed, July 16; filed, July 16; cost \$2700.

Turk street No. 314 and 324. Alterations and repairs; owner, Emilie Haller; architects, Wright & Sanders; contractor, J. S. Mackey; signed, July 16; filed, July 17; cost \$3610.

Turk near Buchanan. To build house and stable; owner, Wm. F. Wilson; contractor, F. C. Bell; signed, Aug. 6; filed, Aug. 6; cost \$6000.

Union near Fillmore. To build; owner, Mrs. J. Ryerson; architect, F. P. Rabin; contractor, J. A. McDonald; signed, Aug. 2; filed, Aug. 5; cost \$2638.

Washington near Octavia. Additions and alterations; owner, R. B. Furman; architect, W. J. Mathews; contractor, J. A. Smilie; signed, July 26; filed, July 27; cost \$1997.

Welsh near 4th. Additions; owner, Mrs. Deagan; contractor, T. F. Mitchell; cost \$800.

Welsh near Fourth. Repairs; owner, Estate of R. White; architect, R. H. White; contractor, D. H. Matheson; signed, July 17; filed, July 17; cost \$1900.

Willow Ave. near Buchanan. To build; owner, Annette Reimochel; architect, H. D. Mitchell; contractor, Geo. Lack; signed, Aug. 8; filed, Aug. 9; cost \$2950.

York near 21st. Cottage; owner, Bridget McDermott; contractors, Blanchard & Clark; signed, July 26; filed, July 27; cost \$1575.

York near 21st. To build; owner, T. E. Brown; contractor, T. C. Cochrane; cost \$3500.

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6 inch.....	9 00	30 00	54 00	95 00
7 inch.....	10 50	35 00	63 00	110 00
8 inch.....	12 00	40 00	72 00	125 00
9 inch.....	13 50	45 00	81 00	140 00
10 inch.....	15 00	50 00	90 00	155 00
11 inch.....	16 50	55 00	99 00	170 00
12 inch.....	18 00	60 00	108 00	185 00
13 inch.....	19 50	65 00	117 00	200 00
14 inch.....	21 00	70 00	126 00	215 00
15 inch.....	22 50	75 00	135 00	230 00
16 inch.....	24 00	80 00	144 00	245 00
17 inch.....	25 50	85 00	153 00	260 00
18 inch.....	27 00	90 00	162 00	275 00
19 inch.....	28 50	95 00	171 00	290 00
20 inch.....	30 00	100 00	180 00	305 00



THE chaotic condition of the ordinances regulating the construction of buildings in the City of San Francisco is a disgrace to any community with any pretense to civilization.

The original ordinances were framed in 1888 and have since been amended, added to and modified so many times that it would take the traditional Philadelphia lawyer to make head or tail out of the resulting tangle.

Several times in the last few years attempts have been made by the Chapter of Architects, the Chief of the Fire Department, and the Board of Supervisors to frame a complete and comprehensive order to take the place of the present disjointed and fragmentary series of orders that are a serious annoyance and source of confusion to architects, owners and contractors alike, but each attempt has only resulted in failure and the situation has been continually changing for the worse. New methods of construction are being continually introduced, and improved methods and materials are taking the place of the antiquated ideas of former generations; to meet these modern requirements should be the aim of our legislators, yet in place of keeping

abreast of the times, and stimulating the progress of invention, that progress is retarded and confined by the swaddling clothes of infancy which should have been discarded years ago.

Chief Sullivan of the Fire Department is now attempting to persuade the Board of Supervisors to give their consideration to this matter, and a petition is being circulated by the architects designed to aid him in his attempt to impress on our City Fathers the importance and necessity of some action being taken with as little delay as possible. Many months time has been devoted to the preparation of a satisfactory ordinance by professional men competent to pass on the many questions involved, and at last an ordinance has been drafted that it is believed will satisfy the different requirements of all the interests concerned. Doubtless there are clauses that are open to objection, but taken as a whole there is no question but it will prove a great improvement on the existing laws, and will give the Architects and Builders the positive knowledge of what is not permissible, which it is so difficult to obtain at present, and thus remove many causes of contention that frequently disturb the harmonious relations that should exist between the property owner, the Fire Department, the Insurance Companies and the Architect.

PROPOSED NEW CITY HALL FOR OAKLAND.

THE following extracts from the Architect's Report to the Oakland Officials gives a description of the building, and the method proposed to be used in raising money to build same.

The key note to the plan lies in the fact that Washington street, which is now blocked by the present City Hall, is desired to be continued through the City Hall lot and so on to San Pablo Ave. The design allows this and at the same time preserves the *coup d'œil* which all public buildings should have, i. e., a position at the end of a street. The street is continued full width through the building—which is carried over it by arches of colossal proportions, this curtain between the two wings being surmounted by a Tower.

The ground floor is occupied by stores. The arch over the roadway is carried through two stories so that there will be no communication between the wings on the second story. One of these wings on this floor being devoted to a Public Library and the other to the Council Chamber, no communication is necessary.

By this arrangement the Library is entirely separate from rest of building—which is necessary—and the Council Chamber, and the crowds attending on its sessions, are secluded from what might be called the Administrative Offices—which is desirable.

The whole of the third floor is devoted to the offices—while the fourth floor is at present to be left vacant until such time as its space is required by the offices of electric and gas lighting, water works, street railways and other public utilities which will some time be under the control of the Municipality.

Meanwhile the space is proposed to be used for a Public Gymnasium—for public conveniences—and promenade on top of the curtain building.

Two fast elevators would be used one for each wing, and the main entrances would be under the archway in Washington street.

As to the method of raising money to build this Municipal Palace it is proposed to do so by the following means:—

The cost of erecting a fire-proof building would be about \$500,000—for which bonds would have to be issued payable in twenty years. They are to be issued in small denominations as low as five dollars. These would be taken up by the people at three per cent interest as has already been proved at Philadelphia.

The building would take say four years to build, so that \$125,000 of bonds would be issued every year—at end of the first year would be due one-twentieth of \$125,000 or \$6,250 and interest \$3,750.

Second year there being another issue of \$125,000 there would be due \$12,500 and interest and so on to the end of the third year when the stores would be ready for occupancy.

There are sixteen stores, each would let for \$100 per month, altogether \$1,600 a month, \$19,200 per year, say \$19,000; so that at end of fourth year or at completion of building the amount would stand thus:—

Payable on \$437,500 bonds outstanding, one-twentieth	\$21,875
Interest on same at three per cent	13,125
	\$35,000
Deduct rent of stores	19,000
Balance to be paid at end of fourth year	\$16,000

Thus it is seen that the interest is all paid by rent and

we have \$2875 to carry to general municipal expenses or to pay off principal by loaning out the Sinking Fund at three per cent to the people instead of paying into General Fund; before the end of sixteen years the whole \$500,000 will be paid off and the City will be having an income of \$19,000 per year or whatever more the stores will rent for at that time. We will not burden our readers with figures to prove this, but it is so.

This is supposing these bonds are presented every year for redemption. I believe however that the mechanics, architects and superintendents would be glad to receive one-half of their pay in these bonds—especially if the shopkeepers would receive the same in payment for goods and if they refused the city could make arrangements by which the men could get provisions, etc., for these bonds.

They would be found so convenient however as money that very few would be presented for cashing at the City Treasury and as the interest would die out as the bonds matured, this would inure to the benefit of the City so much and the burden upon the city at any time would be but little.

REPORT OF THE CONSULTING ARCHITECT ON THE PLANS OF A. PAGE BROWN FOR THE NEW UNION DEPOT AND FERRY HOUSE.

SAN FRANCISCO, Sept. 10, 1895

To the Honorable Board of State Harbor Commissioners.

GENTLEMEN:—In compliance with instructions received from your President, on August 28th, we have examined the plans and specifications prepared by A. Page Brown for the proposed Union Depot and Ferry House, with a view to suggesting any modifications that might be better adapted to the use of California materials, and an economical application of the same.

To receive a complete set of drawings and specifications from Mr. Brown, who has also extended every courtesy and facility for examining into the details of the work.

We would say in general we find the plans of the building very complete, and we think well adapted to the objects for which it is designed.

The most important point in which we would differ from the opinion of the designer, is the unit of floor loads to be assumed as a factor for estimating the strength of floor beams, girders and supporting columns.

The plans for metal work as prepared, are estimated to carry with safety, something in excess of 225 pounds per square foot of floors throughout, including Mezzanine floors and the fourteen floors in tower. As the constant weight of beams, tile arches and cement or mosaic floors will be about ninety pounds per square foot it leaves about 135 lbs. per foot for the estimated superimposed load.

The greatest load that can possibly be put on these floors at any place, when used for its legitimate purpose, is a crowd of people, and as people cannot be crowded so as to weigh over eighty pounds to a square foot of floor surface, we think that is all that should be calculated for, or after adding, say, ninety-five pounds for weight of floor, using 175 pounds as the unit of safe floor load.

As this safe load is supposed to have a factor of safety of four for the breaking strength, it follows that it would require a superimposed load of about 600 pounds per foot to break down such floors, or one-half of that amount to strain the material to their elastic limit, and as its greatest load

can be only eighty pounds, it would seem that the margin was abundant.

We would, therefore, suggest that the thickness of metal in beams, girders and columns, be reduced to meet such requirements.

In regard to the beams being furnished by local rolling mills we would observe the spans throughout are about twenty-eight feet, and for any assumed floor load, twenty inch beams are more economical than those of less depth. Our local mills are not prepared to roll beams over fifteen inch in depth. These, if used in the work, would require approximately twenty per cent more metal than would twenty inch beams.

If fifteen inch beams are allowed to be estimated on, the field of competition would be widened, and possibly the price per pound might be less than for twenty inch beams. The cost of the work will doubtless be greater with fifteen inch beams than with twenty inch beams.

We would recommend reducing the weight of tower walls and floors as suggested by Engineer Holmes.

The building as now designed, has skeleton steel construction throughout, except at the front facade.

We believe it would be advisable to put in Z bar columns in the front, and thereby make the entire frame independent of the walls.

The plans are prepared for cast iron columns in the first story, while the specifications give the contractors the privilege of substituting Phoenix steel columns.

As these are to be exposed to the atmosphere and all sorts of wear and conditions, we think cast iron is best for the purpose and they can be produced here without difficulty.

We should remove that choice from the specifications, and require cast iron columns as designed.

The tower Z bar columns, we would require in two story lengths, breaking joints at alternate stories, and put together with fish plates, with the bracing and other parts as on the strain diagram prepared by Mr. Holmes.

As to the general design and details of walls, the plans are worked up for pressed bricks and terra cotta, with a granite base. These materials we consider the most appropriate and economical for clothing and protecting steel construction from the effects of the elements, including fire.

Alternative plans are prepared for stone and bids will be invited for various kinds of that material. If stone were used, the building would appear more monumental and impressive.

We would recommend the cellular constructions in either case, and the proposals submitted will doubtless form the basis of your decision as to the materials to be used.

We shall hope to see glazed bricks used for lining inside walls, corridors, etc., as designed, although alternative bids are to be taken for pressed bricks.

In regard to the scheme of thin marble veneering as proposed by Mr. Pelton, we would say we consider the method in general is practicable and perfectly feasible, if performed with faithful skill and care, and every precaution taken to overcome possible defects.

The vertical joints at angles should be disguised by small reentrant angles, or in quirks of beads, or other manner.

The metal adjustable anchors holding the slabs to the steel frame, should be of some metal or alloy not liable to corrosion, and should extend upward from the joints to the frame, across the air space, so as not to conduct water to the steel frame.

The greatest care should be exercised to fill the joints

both vertical and horizontal, with good cement, and after every precaution is taken, we believe some water would find its way through the lofty exposed sides of the tower, and in such places copper gutters should be arranged in the air space above the roof of main building, to catch such leakage, and conduct it out over the main roof.

While we believe buildings may be faced up in this manner to last as long as any portion, we do not feel like recommending it on so large a scale and on such an important building in such an early stage of the methods development. Its cost and probability of getting material within reasonable time, will also be factors in your final decision.

In regard to the Portland cement used for brick and concrete work, we think an excess amount is specified. We would suggest for the mortar used in brick work, one part of cement to four parts of lime mortar, made in the usual manner, with North Beach sand; and for the concrete filling and lower portions of floors, one part of cement to nine or ten of properly selected aggregates. And in all cases, we would urge as very important, that the Board of Harbor Commissioners furnish the cement and not the contractors.

Otherwise it will require the constant watchfulness of a superintendent to get one-half of the above amount of cement in the mortar for brick work. With the Board furnishing the cement, the proportions may be changed by the Architect or Superintendent, when it appears desirable, without loss or profit to the contractor.

Finally, we would reduce the thickness of the galvanized iron for all work of that character, from No. 18 to No. 22, as that is as heavy as can be worked by any machine on this coast.

The above are all the suggestions and recommendations we have to make, the advisability of which we will be pleased to discuss with your Honorable Board, Architect and Engineer at any time.

Respectfully submitted,

PERCY & HAMILTON.

FORM OF CONTRACT ADOPTED BY THE ROYAL INSTITUTE OF BRITISH ARCHITECTS.

ARTICLES OF AGREEMENT made the day of 189 between of in the County of (hereinafter called "the Employer") of the one part and of and of County of Builder* (hereinafter called "the Contractor") of the other part. Whereas the Employer is desirous of a message and premises at and has caused Drawings and a Specification describing the work to be done to be prepared by of, his Architect: And whereas the said Drawings numbered 1 to inclusive and the Specification marked "A" have been signed by or on behalf of the parties hereto: And Whereas the Contractor has agreed to execute upon and subject to the Conditions set forth in the Schedule hereto (hereinafter referred to as "the said Conditions") the works shown upon the said Drawings and described in the said Specification for the sum of £

* Insert "and co-partners" if such is the fact.
† Insert "erection" or "restoring" or "adding to" as the case may be.

Now it is Hereby Agreed as Follows:—

1. Inconsideration of the sum of £ to be paid at the times and in the manner set forth in the said Conditions, the Contractor will upon and subject to the said Conditions

execute and complete the works shown upon the said Drawings and described in the said Specification.

2. The Employer will pay the Contractor the said sum of \$ or such other sum as shall become payable hereunder at the times and in the manner specified in the said Conditions.

3. The term "the Architect" in the said Conditions shall mean the said or, in the event of his death or ceasing to be the Architect for the purpose of this Contract, such other person as shall be nominated for that purpose by the Employer not being a person to whom the Contractor shall object for reasons considered to be sufficient by the Arbitrator mentioned in the said Conditions. Provided always that no person subsequently appointed to be Architect under this Contract shall be entitled to disregard or overrule any decision or approval or direction given or expressed by the Architect for the time being.

4. Any reference in the said Conditions to the Bills of Quantities shall not have the effect of constituting them part of this Contract.

5. The said Conditions shall be read and construed as forming part of this Agreement, and the parties hereto will respectively abide by and submit themselves to the conditions and stipulations and perform the agreements on their parts respectively in such Conditions contained.

As witness our hands this day of 189

Signed in the presence of

SCHEDULE OF CONDITIONS.

DRAWINGS AND SPECIFICATION.

1. The works shall be carried out in accordance with the directions and to the reasonable satisfaction of the Architect in accordance with the said Drawings and Specification, and in accordance with such further drawings, details, and instructions in explanation of the same as may from time to time be given by the Architect. The Contractor Drawings and Specification shall remain in the custody of the Architect, and shall be produced by him at his office as and when required by the Employer or by the Contractor.

COPIES OF DRAWINGS AND SPECIFICATION.

2. One complete copy of all Drawings and of the Specification shall be furnished by the Architect free of cost to the Contractor for his own use. The Architect shall furnish to the Contractor, within days after the receipt by him of a request for the same, any details which in the opinion of the Architect are necessary for the execution of any part of the work, such request to be made only within a reasonable time before it is necessary to execute such work in order to fulfil the Contract. Such copies and details shall be kept on the works until the completion thereof, and the Architect or his representative shall at all reasonable times have access to the same, and they shall be returned to the Architect by the Contractor on the completion of the Contract.

COPY OF ESTIMATE.

3. The Contractor shall on the signing thereof furnish the Architect with a verified* copy of the original estimate for his sole use or that of the Surveyor appointed as in Clause 13 hereof, and for the purposes only of this Agreement.

* The word "sealed" to be inserted if so agreed.

CONTRACTOR TO PROVIDE EVERYTHING NECESSARY.

4. The Contractor shall provide everything necessary for

the proper execution of the works, according to the true intent and meaning of the Drawings and Specification taken together, whether the same may or may not be particularly shown on the Drawings or described in the Specification, provided that the same is reasonably to be inferred therefrom; and if the Contractor find any discrepancy in the Drawings, or between the Drawings and Specification, he shall immediately refer the same to the Architect, who shall decide which shall be followed. Figured dimensions are to be followed in preference to the scale.

LOCAL AND OTHER AUTHORITIES; NOTICES, ETC.

5. The Contractor shall conform to the provisions of any Acts of Parliament relating to the works, and to the regulations and by-laws of any Local Authority, and of any Water and Lighting Companies with whose systems the structure is proposed to be connected, and shall, before making and variation from the Drawings or Specification that may be necessitated by so conforming, give to the Architect written notice, specifying the variation proposed to be made, and the reason for making it, and apply for instructions thereon. In case the Contractor shall not in due course receive such instructions he shall proceed with the work, conforming to the provision, regulation, or by-law in question, and any variation so necessitated shall be dealt with under Clause 13. The Contractor shall give all notices required by the said Acts, regulations, or by-laws to be given to any Local Authority, and pay all fees payable to any such Authority, or to any public officer in respect of the works.

SETTING OUT OF WORK.

6. The Contractor shall set out the works, and during the progress of the building shall amend at his own cost any error arising from inaccurate setting out, unless the Architect shall decide to the contrary.

MATERIALS, ETC., TO CONFORM TO SPECIFICATION.

7. All materials and workmanship shall be of the respective kinds described in the Specification, and the Contractor shall upon the request of the Architect furnish him with vouchers to prove that the materials are such as are specified.

FOREMAN.

8. The Contractor shall keep constantly on the works a competent general foreman, and any directions or instructions given by the Architect to such foreman shall be held to have been given to the Contractor.

DISMISSAL OF WORKMEN BY ARCHITECT.

9. The Contractor shall, on the request of the Architect, immediately dismiss from the works any person employed thereon by him who may, in the opinion of the Architect, be incompetent or misconduct himself, and such person shall not be again employed on the works without the permission of the Architect.

ACCESS FOR ARCHITECT TO WORKS

10. The Architect and any person authorized by him shall at all reasonable times have access to the works, and the Architect and his representatives shall at like times have access to the workshops of the Contractor or other places where work is being prepared for the building.

CLERK OF WORKS.

11. The Clerk of Works shall be considered to act solely as inspector and under the Architect, and the Contractor

shall afford him every facility for examining the works and materials.

VARIATIONS AND EXTRAS.

12. The Contractor shall not vary from the Drawings of Specification except as provided by Clause 5, or by the authority of the Architect, which is to be sufficiently proved by any writing or drawing given by him or by any subsequent written approval by him. If the work shown on any of the details or the further drawings or details referred to in Clause 1, or necessary to comply with any instructions, directions, or explanations which may be given from time to time by the Architect, be, in the opinion of the Contractor, in excess of that comprised in the Contract, he shall, before proceeding with such work, give notice in writing to this effect to the Architect. In the event of the Architect and Contractor failing to agree as to whether or not there is any excess, and of the Architect's deciding that the Contractor is to carry out the said work, the Contractor shall accordingly do so, and the question whether or not there is any excess, and if so the amount thereof, shall, failing agreement, be settled by the Arbitrator as provided in Clause 32, and the Contractor shall be paid accordingly. No claim for an extra shall be allowed unless it shall have been executed under the provisions of Clause 5, or by the authority of the Architect as herein mentioned. Any such extra is hereinafter referred to as an authorized extra.

PRICE FOR EXTRAS; HOW ASCERTAINED.

13. No variation shall vitiate the Contract; but all authorized extras for which a price may not have been previously agreed, and any omission which may have been made with the knowledge of the Architect, or without his knowledge, provided he subsequently give a written sanction to such omission, shall be measured and valued, as hereinafter provided, by * ; and a copy of such measurement and valuation shall be given to the Contractor. The fees for so measuring and valuing the variations shall be added to the contract sum. If in the opinion of the Architect the work cannot be properly measured and valued, day work prices shall be allowed therefor, provided that vouchers specifying the time and materials employed shall have been delivered for verification to the Architect, or his nominee, at or before the expiration of the week following that in which such work shall have been done. The variations shall be valued at the rates contained in the Contractor's original estimate, or, where the same may not apply, at rates proportionate to the prices therein contained. The amount to be allowed on either side in respect of the variations so ascertained shall be added to or deducted from the contract sum as the case may be.

* Insert "the Architect," or "a Surveyor appointed by the Architect and approved by the Contractor."

BILLS OF QUANTITIES; EXPENSES OF.

14. The fees for the Bills of Quantities and the Surveyor's expenses (if any) stated therein shall be paid by the Contractor to the Surveyor named therein out of and immediately after receiving the amount of the certificate or certificates in which they shall be included. The fees chargeable under Clause 13 shall be paid by the Contractor before the issue by the Architect of the certificate for the final payment. If the Contractor fails or neglects to pay as herein provided, then the Employer shall be at liberty, and is hereby authorized, to do so on the certificate of the Architect, and the amount so paid by the Employer shall be de-

ducted from the amount otherwise due to the Contractor.

NOTE: In cases where the Surveyor is engaged by the Employer to be paid direct by him this clause will come out.

UNFIXED MATERIALS WHEN TAKEN INTO ACCOUNT TO BE PROPERTY OF EMPLOYER.

15. When the Contractor shall have received payment of any certificate in which the Architect shall have stated that he has taken into account the value of any unfixed materials intended for the works, and placed by the Contractor thereon, or upon ground adjacent thereto, all such materials shall become the property of the Employer, and shall not be taken away, except for the purpose of being used on the building, without the written authority of the Architect; and the Contractor shall be liable for any loss of or damage to such materials.

POWER OF ARCHITECT TO ORDER REMOVAL OF IMPROPER WORK.

16. The Architect shall, during the progress of the works, have power to order in writing from time to time the removal from the works, within such reasonable time or times as may be specified in the order, of any materials which in the opinion of the Architect are not in accordance with the Specification or the instructions of the Architect, the substitution of proper materials, and the removal and proper re-execution of any work executed with materials or workmanship not in accordance with the Drawings and Specification or instructions; and the Contractor shall forthwith carry out such order at his own cost. In case of default on the part of the Contractor to carry out such order, the Employer shall have power to employ and pay other persons to carry out the same; and all expenses consequent thereon or incidental thereto shall be borne by the Contractor, and shall be recoverable from him by the Employer, or may be deducted by him from any moneys due or that may become due to him.

DEFECTS AFTER COMPLETION.

17. Any defects, shrinkage, or other faults which may appear within months from the completion of the works, arising in the opinion of the Architect from materials or workmanship not in accordance with the Drawings and Specification or the instructions of the Architect, or any damage to pointing by frost appearing within the like period, shall upon the directions in writing of the Architect, and within such reasonable time as shall be specified therein, be amended and made good by the Contractor at his own cost, unless the Architect shall decide that he ought to be paid for the same; and in case of default the Employer may employ and pay other persons to amend and make good such defects, shrinkage, or other faults or damage, and all expenses consequent thereon or incidental thereto shall be borne by the Contractor and shall be recoverable from him by the Employer, or may be deducted by him from any moneys due or that may become due to the Contractor. Should any defective work have been done or material supplied by any sub-contractor or other person employed on the works who has been nominated or approved by the Architect, the Contractor shall be liable to make good in the same manner as if such work or material had been done or supplied by the Contractor, and been subject to the provisions of this and the preceding clause.

WORK TO BE OPENED UP AT REQUEST OF ARCHITECT.

18. The Contractor shall, at the request of the Architect, within such time as the Architect shall name, open for in-