

The California Architect and Building News.

Copyrighted 1895, by the California Architectural Publishing Company.

OFFICE, 408 CALIFORNIA STREET,

SAN FRANCISCO, CAL., U. S. A.

VOL. XVII.

INDEX.

1896

INDEX TO CONTENTS.

Advertiser's Index.....	VI	Electric Data.....	16
American Institute of Architects.....4, 15, 51, 61, 80, 141		Emporium Building.....43	57
Annual Summary of Building Operations.....7	81	Electrical Hardening of Steel.....	79
Annual Meeting of the Builders' Exchange.....	34	Enameled Brick for Subway.....	102
Architecture and Engineering.....	30	Examination for Draughtsman.....	103
Architect's Legal Rights and duties.....	63	Elevators, the Latest in.....	104
Antiquated Street Car Heating.....	66	Expectoration in Public Places.....	74
Architectural Competition.....	78	Forestry Department of Agriculture.....	29
Architects Services, A Public Estimate of.....	80	Fire Escapes.....	40
Aiken's Design for San Francisco Post Office.....123		Flats on Post street.....	70
Architects Annual Convention of Texas State Ass'n.....101		Flooring Public Buildings, Expectoration on.....	74
Architects Bond, Newark, New Jersey.....	63	Forest Reserve in Minnesota.....	77
Art League of the U. S.....	56	Fire Proof Floor Construction, A New.....	66
Bestor, H. T., death of.....	1	Glasgow, As Example of Expropriation.....	111
Brown, Page A., death of.....	1	Governmental Architecture.....134, 135	
Books and Periodicals.....8, 20, 32, 41, 55, 68, 81, 92, 104, 115, 127, 138		Home Arts in the Cumberland Mountains.....135, 136	
Business Mosaics.....11, 23, 35, 58, 71, 83, 94, 106, 118, 131, 143		Housing of People of Small Incomes...87, 98, 110, 128, 139, 140, 141	
Builders' Exchange, Annual Meeting of.....	34	Hopkins' Mark, Institute of Art.....	89
Builders' Exchange, Members of.....	XI	Health, Board of San Francisco, New Rules and Regulations of.....	75
Board of Health of San Francisco.....	75	Hospital, Children's.....	10
Brick Enameled for the Blackwell Subway.....	102	Houses, New, Premature Occupation.....	113
Buildings Transactions, Summary of Annual.....	7, 81	Hall of Justice, San Francisco, Incomplete Site for...13	50
Bill to Check the Waste of Timber.....	65	Insulation.....	54
Bill as to Obtaining Plans for Public Buildings, Cal.....	2	Is the West Discontented.....	86
Bill Regulating Height of Buildings in N. Y.....	51	Lettering.....	4
Bill for Supervising Architect of Treasury Department.....	51	Legal Decisions...8, 22, 31, 47, 59, 70, 82, 95, 105, 118, 130, 142, 143	
Bicycles, Affect on the Farmers by.....	117	"Little Jim" Wing of Children's Hospital.....	10
Bill for Public Works.....	141, 142	Lodging Houses for Working People, Provision for.....	100
Cheap Telephones System.....	135	London Letter, Our.....	91
Competitions, Opinions of Architects as to...2, 31, 53, 64		Law for Obtaining Plans for Public Works.....	2
Competition, Architect's League of New York.....	7	Members of Builders' Exchange.....	XI
City Building News...12, 24, 36, 47, 59, 71, 84, 94, 105, 119, 132, 144		Municipal Buildings.....	50
City Building, Danger of.....	13	Morgan Heating and Ventilation System.....	57
City Hall, The Old San Francisco.....	18	Mortar, The Strength of Common.....	105
Correspondence.....31, 41		Mortar Mixing in the Streets.....	109
Competition in Business.....65, 74		Money.....	110
Competition, International for Kieff Theatre.....	124	Manufacturers' National Association.....	62
Chicago Architectural Club.....	66	Nickel Steel.....	21
Celery for Rheumatism.....	79	Notice of Meetings...22, 34, 42, 57, 67, 80, 90, 102, 114, 120, 127	
Cement Affected by Freezing.....	103	Notes and Comments.....7, 42, 104, 114, 125, 137	
Cement, A Strong.....	80	National Departments, U. S., Revision of.....	62
Cement.....	103	National Loans to Municipalities.....	97
Compressed Air for Street Cars.....	103	Oaklands Exposition.....	7
Civil Engineers, Annual Convention of.....	69	Oaklands Sixth Ward School.....	9
Draughtsmen Examination of.....	103	Post-Office Building at San Francisco...14, 50, 61, 74, 85, 98, 109, 121, 123	
Durability of Timber.....	117	Post-Office Building, An Old.....	38
Death Notice of Architects—			
—H. T. Bestor.....	1		
—A. P. Brown.....	1		
—W. Mooser.....	121		
Discontentment in the West.....	86		
Drainage Canal at Chicago.....	112		

THE CALIFORNIA ARCHITECT AND BUILDING NEWS.

Plastering, Points on.....	67
Park Lodge, San Francisco.....	69
Professional Graduates.....	75
Paving Material.....	91
Photography in Colors.....	103
Premature Occupation of New Houses.....	113
Public Estimate of Architect's Services.....	80
Plumbing Law New for N. Y.....	69
Plumbing Law New for San Francisco.....	75
Pavey Bill for Regulating Height of Buildings in N. Y.....	51
Plumber, The New.....	68

Residence of E. Coleman.....	10
Residence of Mrs. Anna M. Wohler.....	33
Redesigning Objectionable Buildings.....	90

State University at Berkeley.....	2, 31, 52, 63, 122
State University, Competition for Buildings.....	2
San Francisco Chapter A. I. A.....	4, 55, 61, 80
San Francisco Chapter A. I. A., Resolutions Ament Berkeley University Buildings.....	26
Students' Notices.....	7
Safeguards for Modern Building.....	67
Socialism.....	73
Sky-Scrapers from a Fireman's Point.....	125
Steel, A New Process for Manufacture of.....	130
Street Cars, Compressed Air for.....	103
Sanitary Laws.....	88
Sanitary Purposes, Expropriation for.....	99, 110
Sanitary Reform Some Results of.....	128
Sanitary, Aid Societies.....	129
School Houses, Sixth Ward of Oakland.....	9
Supervising Architect of Treasury Department, Bill.....	57
Supervising Architect of Treasury Dep't, Criticism.....	38
St. James Office Building Scheme.....	100
Strength of Common Mortar.....	105

Title to Lands.....	25
Torren's System of Land Transfers.....	26
Tall Office Buildings.....	30, 103
The Bishop Paid the Bill.....	77
Tenders to be Received.....	130
Timber, A Bill to Check the Waste of.....	65
Trans-Mississippi International Exposition, Omaha.....	142

Ugly Buildings.....	86
University of Cal., Competition for New Buildings.....	2, 31, 52, 64, 122
Washington Chapter, A. I. A.....	28
Waste of Timber.....	65
Wolsey's Gold Knocker.....	68
Wall Finish, Improvement in.....	76, 102
Wood Pulp in Architecture.....	102
White Pine, The Destruction of.....	104
Wonderful Things That are Near.....	117

TEXT CUTS.

	PAGE
Bath Tub.....	44
Desks.....	71, 83
Emporium Building, Interior Views.....	43, 44, 45, 46
Gateway, Cypress Lawn Cemetery.....	105
Lodge, Golden Gate Park, Commissioner's Room.....	69
Marble Facing Construction.....	4, 5
Mill—Combination.....	116
Opyx Mantel.....	33
Post-Office, San Francisco.....	49, 50, 85

ILLUSTRATION.

(Numbers refer to number of Journal.)

DWELLINGS

Flats on Post street, San Francisco, Wm. Mooser & Son, Architect.....	6
Flats and Stores at South Park, San Francisco, Wm. Curlett, Architect.....	10
Residence for Ed. Coleman, W. H. Lillie, Architect.....	1
Residence for Mrs. A. M. Wohler, E. J. Molera, Architect, (four interior and exterior views).....	3
Residence in Marin Co., Havens & Toepke, Architects.....	5
Residence at Belvedere, F. R. Collins, Del.....	10

ECCLIESIASTICAL

Bishop Memorial Chapel, Honolulu, H. I.....	7
Chapel, Cypress Lawn Cemetery, T. P. Ross, Architect.....	9
Russian Church, Sitka.....	6

EDUCATIONAL

Library, Stockton, J. C. Pelton, Architect.....	1
School House, Sixth Ward, Oakland, W. J. Cuthbertson, Architect.....	1
School House, Marshfield, Oregon, P. Chappelle Brown Architect.....	5
School House, Honolulu, H. I.....	6
School House, Ventura High.....	6

HOSPITALS

Home for Feeble Minded Children, Glen Ellen, (two views) Copeland & Peirce, Architects.....	2
"Little Jim Ward" of Children's Hospital, San Francisco, A. C. Schweinfurth, Architect.....	1

MERCANTILE

The Emporium Building, San Francisco, Pissis & Moore, Architects, Plans, Section, Interior and Exterior Views.....	4, 5
--	------

MISCELLANEOUS

A Century Old Adobe, San Louis Obispo Co.....	6
---	---

MONUMENTAL

Columbarium, Cypress Lawn Cemetery, San Francisco, T. P. Ross, Architect.....	10
Crematory, Cypress Lawn Cemetery, San Francisco, Pissis & Moore, Architects.....	9
Crematory, I. O. O. F., Cypress Lawn Cemetery, Stone & Cahill and T. P. Ross, Architects.....	10
Vault at "Home of Peace" Cemetery, Edw. Kollofrath, Architect.....	8

PUBLIC

Capitol, Montana, (with plans) W. J. Cuthbertson, Architect.....	11
Hall of Justice, San Francisco, (with plan) Shea & Shea, Architects.....	12
Hall of Justice, Competitive Plans, W. O. Banks, Architect.....	8
Hall of Justice, Competitive Plans, Wm. Mooser, & Son, Architects.....	8
Hall of Justice, Competitive Plans, Havens & Toepke, Architects.....	8
Old City Hall, San Francisco, (two views).....	2
Study for Small Court House, W. J. Cuthbertson, Architect.....	7

SOCIAL

I. O. O. F. Orphanage, Thermalito, Cal., Herman & Swain, Architects.....	7
Lodge, Golden Gate Park, E. R. Swain, Architect.....	6
Maria Kip Orphanage, San Francisco, (with plans) — Percy & Hamilton, Architects.....	9

The California Architect and Building News.

Copyrighted 1895, by the California Architectural Publishing Company.

OFFICE, 408 CALIFORNIA STREET,

SAN FRANCISCO, CAL., U. S. A.

VOLUME XVII.

JANUARY 20th, 1896.

NUMBER I.

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

Published on or about the 20th of each month by The California Architectural Publishing Company. The Stockholders being Architects and others interested in the profession.

SUBSCRIPTION TO THE JOURNAL, \$3.00 PER YEAR IN ADVANCE.

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

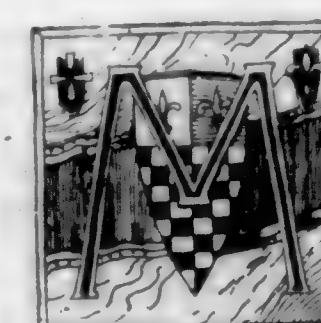
W. J. CUTHBERTSON, President. OLIVER EVERETT, Secretary.

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



Head our paper with different annual numerals and 1896 is now well under way. The stocks of goods which were produced in our busy years being now somewhat depleted after four years of non-production and the temper of the people being tried during that time to the utmost of their patience, the indications are that production will again proceed sometime during 1896, and after the general business has got a little headway, building will also commence to boom, and architects, contractors and building employes will again have all they can attend to. THE CALIFORNIA ARCHITECT AND BUILDING NEWS intends to be ready for such and will improve as the boom proceeds. We shall commence at once and with this number we issue four sheets of half-tones with other additional cuts and we intend with proper encouragement to increase the usefulness of our matter and the number of our plates.

We wish the profession generally, from British Columbia to California and from the Pacific to Utah, a prosperous year and more especially those who have stood by the only Architectural periodical of its class upon the Pacific slope and which hopes yet to have many a year of prosperity.

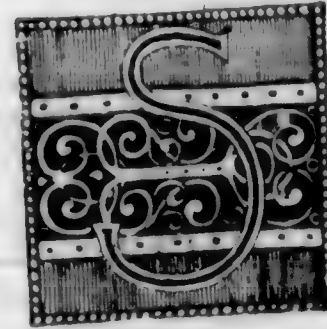


R. H. T. Bestor's death, one time Editor of this paper, took place on the third of this month. He was sixty-one years old and one of the Pioneer Architects of San Francisco. In his later years he devoted himself a great deal to scientific research and belonged to several learned societies including the Chapter of Architects of which he was an active member. He was always willing to impart from his store of knowledge to the students, and they will miss him for he took a great interest in their classes and in their advancement.



N. A. Page Brown, whose death took place on the twentieth of this month, the profession has lost a brilliant member. The terrible injuries he received in the unfortunate accident that happened to him near Burlingham when driving a fast team, he never recovered from. During the short time of his activity in California, he was Architect for quite a large number of the principal new buildings of San

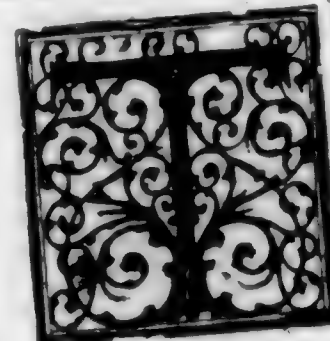
Francisco including the Crocker Building, the Ferry Depot Building, Donohoe Building, and the Manufacturers and Liberal Arts Building of the Midwinter Fair, besides a number of residences.



UCH agitation as is now being made against the conditions of competition for the buildings for the Affiliated Colleges of the University of California, serves a useful purpose and will draw attention to the abnormal and absurd laws now on the Statute Book concern-

ing the obtaining of plans for State work. They are better observed in the breach than in the keeping thereof, and so thought the Regents of the University for so far, in getting plans for their buildings, they have ignored these laws entirely and appointed their architects without regard thereto; until this last competition when the facts of such a Law was brought to their attention by the legal advisors of the State. Now that the impracticability and absurdity of the Law which was either drawn up by someone totally ignorant of the Status of an architect, or to fit some particular job at that time on the tapis so as to prevent all self-respecting and capable architects from competing, has been made apparent, let the Chapter of Architects and outside architects at once get together and see that such a disgraceful and unworkable Law and one so derogatory to themselves is repealed at the first opportunity, and let them devise a better and proper one and get it past by the next Legislature.

In our next number we intend to go into this matter thoroughly and meanwhile invite any suggestions as to the proper kind of a bill to prepare.



HE Artistic public familiar with the grounds and buildings of the State University at Berkeley has long felt the inadequate treatment of these, as so far made, and often longed for some one in authority to take hold of the subject in a proper and broad spirit.

It seems at last we have such a one in Regent Reinstein, lately appointed to that office, who has taken hold of the subject in an energetic, broad and liberal way which is sure to lead to a successful issue. As an instance so as to get the best opinions on the best method of obtaining a complete scheme for said grounds and buildings he sends to all the prominent Architects and Presidents of Universities of America, a series of questions bearing upon the matter—from most of these he has received very painstaking replies.

By the courtesy of the Regent we have had an opportunity of looking over most of their replies and find therein an amount of interesting matter, not only worthy of consideration in this particular case but of general applicability to the architectural world.

We will record here the questions, a digest of the replies and lastly the lessons to be obtained from them.

First question was—

"The desirability and importance of beautiful grounds and surroundings, and buildings which will be both useful and convenient, and at the same time architecturally beautiful and arranged according to some general plan?"

It is a sad commentary on the State of Art Education among the people that such a question should have been necessary—but the present condition of many public grounds and buildings, point vividly to the necessity of impressing the desirability of such things upon those having charge.

It goes without saying that the replies are all thoroughly in favor of such a course—and we cannot refrain from quoting Regent Reinstein's own words in regard to the subject.

"Mr. Maybeck, instructor in architectural drawing has suggested the wisdom of at once setting aside a sum sufficient to obtain the services of the best landscape gardener and the greatest architect obtainable, who shall, within the coming year, and prior to the next session of the Legislature, lay out the permanent plan of the grounds and a general scheme of the buildings contemplated for all time, so that such grounds shall be as nearly ideally beautiful as may be, and that the buildings shall be convenient for use, architecturally fine in themselves and parts of a grand harmonious scheme which shall contemplate upon this, the noblest site on the earth, the most glorious architectural pile in history.

"Not built for a year nor for a hundred years, but for all time; not to rise, like Aladdin's palace, in a night, but during the slow centuries the University is destined to last. Believing as we all do in the great future of our State and her University, we hope it will not be necessary to have the authority of the presidents of the great universities and the best architects of the land to convince the people of the State of California of the wisdom of now laying out the plans of this already great University on a scale commensurate with the power, the pride and the dignity of a great and glorious state. Let us build not rapidly, not lavishly, but slowly, yet grandly, that there may greet the commerce which shall whiten the Golden Gate and the civilization which shall grace this western shore an architectural pile of stately and glorious buildings, which shall rival the dreams of the builders of the Columbian Exposition, which shall do honor and justice to a superb Republic, and to its most favored State, and which, even in their ruins, shall strike the beholder with wonder and rapture."

The second item called for—

"Examples and experience, advantages and disadvantages of Competitive Plans in other structures of which you know?"

The replies to this range from the total condemnation of Competition by Mr. Sullivan to the modified approval thereof in certain cases.

However all condemn generally the idea of a competition and claim that better results are obtained by the appointment of some architect and landscape architect who has already shown his ability by practical work.

Mr. Sullivan of Chicago equals the most rabid socialist in his hatred of Competition—he puts his side of the case in strenuous language—towit:

"I regard the Competition idea as wholly fatuous and chimerical, I regard the assumption that you, I or anyone else can draw intelligent and just conclusions from a set of sketches submitted in Competition to be as false as it is specious and tempting. What you really want in an Architect-Artist is his individual power in grasp, imagination and expression: in other words his matured personality; and this is too complex, too subtle, too intangible a quantity to be discerned in anything but executed work: in a real performance.

"I know all that can be said in favor of the Competition idea: I have heard the arguments *ad nauseum*: each time they grow more revolting and grotesque in the semblance of truth

and each time they caricature still further an art too noble and serious to be thus degraded. Competitions I hold in contempt so great that I do not even wish to make an extended argument against them."

The consensus of experience among the other architects go to show that very few buildings whose architects were obtained by Competition have been successful. We might add also that no better results have been obtained where there has been no Competition and the choice of architect has been left to a public body when such choice has been made without professional guidance. It all depends upon this latter factor in either case, and this is the unanimous gist of the replies.

A great deal of prejudice against competition is due to those cases, of so called competition, which form the majority, where the architect has been first chosen by the public body and a form of Competition gone through afterwards simply to satisfy a Law or the clamors of outsiders.

THE DISADVANTAGES OF COMPETITION ARE STATED AS FOLLOWS:

First—"It would not be assured that the best man competed."—VAUX.

Second—"That at the time the first drawings are made neither the proprietors nor the architects have given the subject sufficient study to know what is advisable, and a competitive drawing is got up hurriedly, in a manner to catch the eye of the judges. The drawing is often used with the result of a very poor solution of the problem being worked out."—HENRY IVES COBB.

Third—"In choosing an Architect without Competition you can take into consideration the work which an Architect has done, his ability in construction and carrying out works, and his general character, and these questions cannot be so well considered in a Competition."—SHEPLEY, RUTAN & COOLIDGE.

THE ADVANTAGES OF COMPETITION ARE STATED AS FOLLOWS:

First—"They are certainly undeniable, if the Competition can be properly ordered."—VAN BRUNT & HOWE.

Second—"We believe that the best results will be obtained by inviting a certain number of architects of well established ability and reputation to submit drawings and paying to them a fixed sum for their drawings; then allowing all other architects not so invited to compete if they so desire, and to provide for the latter a certain number of prizes for an inducement. In this way you will secure all the advantages of a general competition open to every one, and you will also have the assurance that the six or more men from whom you would wish to receive drawings in any event, will also furnish you with their ideas."—CARRERE & HASTINGS.

Third—"The most obvious advantage of a Competition is the opportunity thereby afforded to select and compare among a series of designs. Competitions are at best a cumbersome, costly and unscientific, though sometimes an unavoidable method of selecting an architect."—VAN BRUNT & HOWE, KANSAS.

From the above quotations and from the body of the letters it can be gathered that the general trend of opinions of the correspondents is that in many cases the choice of an architect without Competition is the most advisable, that is if the choice is made by the help of professional assistance. Although many of the writers admit that under a properly conducted Competition the most advantages can be obtained to the employer. It will be noticed that all the valid objec-

tions made against Competitions are not made so much against Competitions *per se*, but against *improper* Competitions, *e. g.*:—Number One and Three disadvantages are answered by number Two advantage whereby the best man can be got to compete by paying him a proper remuneration.

Number Two disadvantage can be overcome by the adoption of the double Competition advocated by the editors of the *American Architect*, "that is to say, instead of holding one competition, it might be advisable to hold two, in which only those who have made the best showing in the first Competition should be invited to take part in the second one, and the actual employment of the winner in the second Competition should be positively assured."

So we see it all depends upon whether the Competition is conducted rightly or not.

The uncertainty of the professional minds on this subject simply indicates to us that we are now in a transitional period—the transition from Competition to Co-operation or Socialism. As we see the trade and manufactures of the world being fast aggregated into the hands of a few large firms—so in the profession of architecture—a few leading firms obtain the cream of the work—preparatory to having all enterprises placed into the hands of the people at large.

But as long as we are still in the Competitive stage—let us use it to our advantage and give talent a chance to be used where otherwise it would be lost; this can only be obtained by Competition in our present position, as this is the only way a man of talent and of no means or influence can hope to make himself known and appreciated.

The Third and Fourth questions as to the proper proportion of premiums to the moneys to be expended and as to the number and character of the premiums—is answered as follows by one correspondent:

Premiums to run from one-half to one and one-half per cent of the cost of the works according to magnitude, which agrees with the usual course, *i. e.*, to spend for premiums one per cent—the amount charged by architects for preliminary sketches.

In this particular case of Plans for a general scheme for University Grounds and Buildings—wherein \$10,000 is proposed to be spent—it is suggested by one that each of the invited Competitors, say six, receive \$1000 each—awarding two \$1000 and two \$500 prizes to outsiders and \$1000 for expenses of Competition, expert fees, etc., which seems about the general idea.

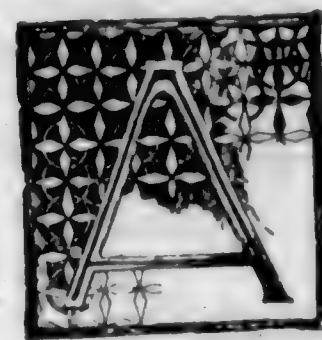
In reply to the question "Whether the Competition should include foreign countries as well as the United States?" we agree with Lindley Johnson when he says "by all means let the world compete."

Learning is cosmopolitan, and the seats of learning should be the same. The lines between foreign and unforeign are being broken down fast in Architecture and are already broken down in Science. Let us not try to put up the fence again. Quite a few of the correspondents however advocate restricting the Competition to the United States—although they seem to us to give no adequate reason therefore.

The last question as to the data necessary to give Competitors a proper idea of the needs, in this particular case, is not of general interest so we will not enter into that matter.

We have attempted here to give a digest of the opinions on the above subjects, all but the subject of the proper conduct of a Competition, which is too wide a field to enter upon at this time—but to which we will draw attention again soon.

LETTERING.



ALTHOUGH in these days of typewriting and shorthand, Caligraphy has not the importance that it had some few years back and still less than it had before the advent of printing, it still forms an important adjunct to the artistic appearance of a plan. If badly done, it detracts much from a well executed drawing; if well done it makes a badly executed drawing pass, when otherwise it would be totally condemned. It goes without saying, however, that no matter how careful a draftsman may be in making an artistic looking title, if he is without the idea of proportion and relative spaces he cannot make a complete success. It requires the artist to do this and he may not scientifically know that a curved letter of the same height as a straight lined letter looks smaller than it in consequence of some law of optics, but he knows it is so, and consequently makes his O taller than his E. So with spacing, he places his letters intuitively apart so that the space between all the letters shall be equal. Although this be so he does this with better grace after he has been through the drudgery of spacing by rule in his student days than he is sure of his ground because he goes to work intelligently.

Prof. Jacoby in his book on Lettering, reviewed in this number gives rules in regard to spacing and relative size of letters which seem to lead to a result as good as can be obtained by using rules—but the fact is that there are so many conditions entering into the relations of letters and their juxtaposition that it is impossible to limit them to any hard and fast Rule, and a good deal must be left to the natural sense of proportion of the draftsman. The modern use of typewriting wherein each letter occupies the same space should it be an M or an I spoils that nice sense of proportion to the modern, and an ordinary person gets his senses by this so warped that in despair, he flies to some rough and uncouth letters to cover his lack in this respect.

However we will not be far into the next century when we shall find the present system of longhand caligraphy almost totally abandoned and some system of shorthand substituted therefor, when it will be a problem for the next generation of draftsmen to make this stenography artistic and lovely looking. It do doubt can be done and the doing away with the fearful waste of time and labor now indicated by the use of longhand will be more than a complete recompense for any loss of æsthetic appearance.

By the beginning of the twentieth century an agreement should be made between all nations as to the adoption of an universal shorthand Phonetic Alphabet, and immediately means taken for the gradual substitution of the old longhand by the new shorthand. The enormous economy in printers ink, paper, pens, etc., makes this an object worth working for by all those who are able to read and write.

Then will come the time when the poet may dash his thoughts down on paper before they can get cold, as the musician now jots down his notes. The bright thoughts will be as common as gold in Cripple Creek, and the litterateur and journalist may give up his midnight oil and get in all he wants by sunlight.

W. J. CUTHBERTSON.

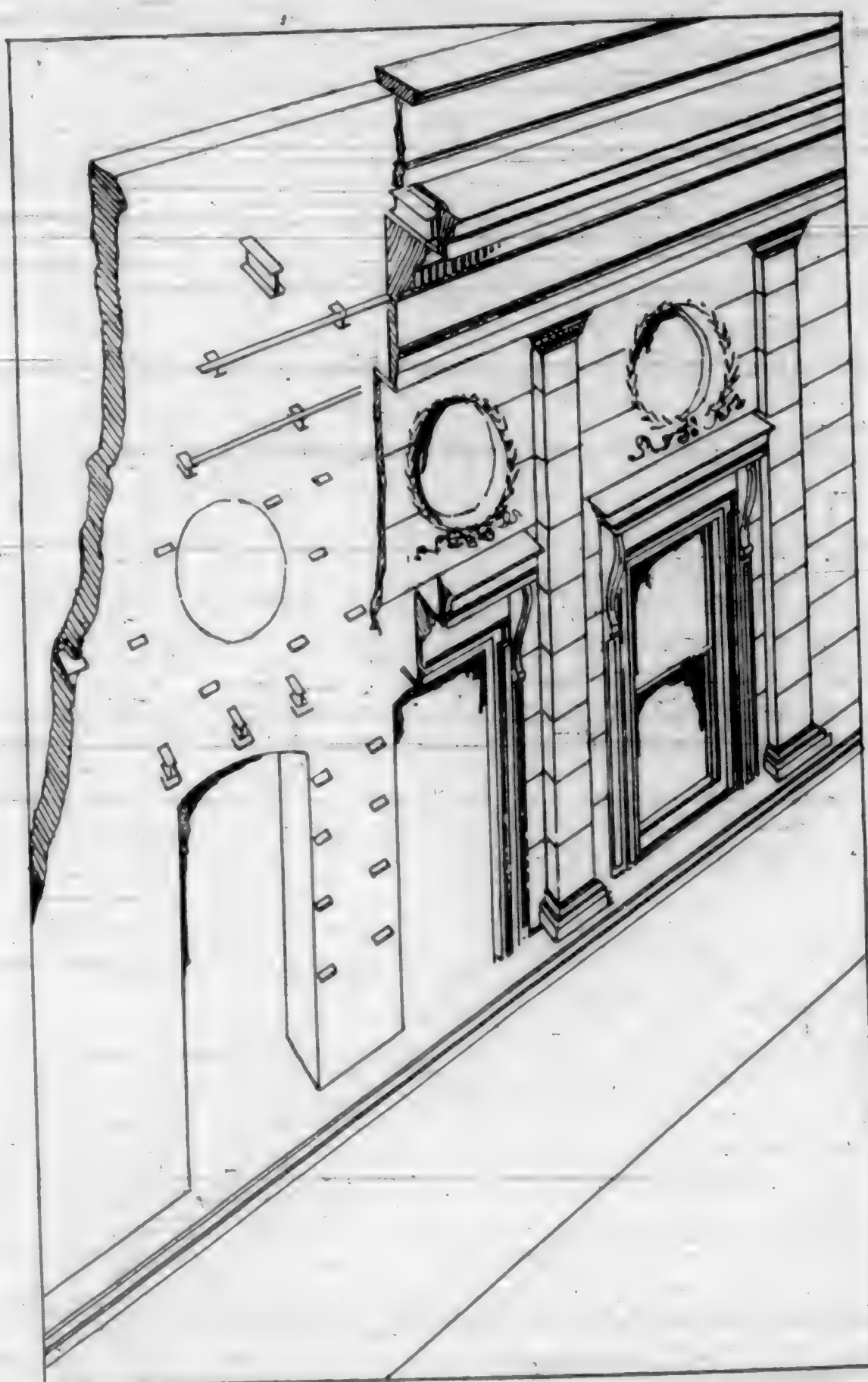
Subscribe for THE CALIFORNIA ARCHITECT AND BUILDING NEWS for the year '96.

PAPER READ BY JOHN COTTER PELTON BEFORE THE SAN FRANCISCO CHAPTER OF THE AMERICAN INSTITUTE OF ARCHITECTS.

THIS paper is not prepared for the purpose of calling your attention to any particular form of released ashlar construction, but to the subject of released ashlar construction in its broad application to modern structures.

I feel that it is a subject in touch with modern thought and in line with modern constructional progress. I think that in our progress toward the attainment, with a minimum of material, of a superior result in effect that this form of construction may play some part.

I would not pull down the monumental memories of Greece and Rome, but may ask of you, shall we ever again build a Parthenon or a Colosseum. Are not our investiga-



tions now in another and different field, influenced and governed by totally different exigencies and sentiments.

The architectural world of 1895 is not the world before Christ, nor is the world of to-day, the world of to-morrow.

The day does not close, but sees at some fellow-craftsman's hands the improvement of a theory or the development of a better one.

I feel the sentiment in each subtle line of Grecian grace, the fragments of the Acropolis hill, tell me of the men who brought their work to such perfection, and they tell me of the spirit which was THERE influence, under which they lived and strove, but it was not the spirit which moves us of to-day.

I will confess to a profound awe in the study of the

Parthenon or the Colosseum, as structures, but still I do not think while engaged in that study that any of us look forward to a commission to build a Parthenon or a Colosseum.

The pyramids are inspiring. That simple, blind purpose, the piling up of stone upon stone, so herculean an accomplishment, as to try the patience in the development of a tenable theory of construction, work costing years of time, and the lives of thousands of human beings, and to obtain a receiving vault of limited size for the security of the remains of a King or his treasure, and I cannot doubt that from a point of security the Greeks would choose, to-day a modern safe deposit vault in preference to any of their temples.

But it quite idle to make these comparisons; let us ask each other, not are we rebuilding pyramids, or Parthenons, but are we building, to-day, even as our masters built? Are we building just as we were ourselves building, only a few years ago?

I hardly believe that any of us would confess that ours is the only craft, not in the procession, which moves slowly but surely as the star of the empire, with that profound sentiment, that unconquerable purpose, the improvement of the condition of man. But rather may we not claim that through all ages, in architectural development will be found a certain and positive index of the condition of religions, social and commercial life.

The impellant idea which I have had in mind in the perfection of a method of safe construction of a thin ashlar facing for a structural wall, is the minimum use of the more costly and beautiful materials, stone and marble, an idea, originating possibly in the pyramids, and developing in the Latin countries early in the Christian Era. I have hardly had time or opportunity to trace the earlier applications of the idea. We need, I think, go no further back than the pyramids of Cheops, where, we may find the most positive and elaborate evidence, in heavy ashlar of black granite on the exterior, and of more rare and beautiful colored granites and porphyry in the interior passages, nor is it necessary to take up time in such an effort. We know that in the old world it is seen on every hand in many forms and degrees of thickness, frequently in the form of a mere veneering of inch marble.

St. Marks in Venice, from sill to spires, is of rare and beautiful marbles, and I am sure no question will be raised of its permanency, although the application or method of attachment was most simple, done only by wiring and cementing, but rather I feel a question would have been raised by this economical race of people against the burying in walls of unnecessary thickness of costly stone.

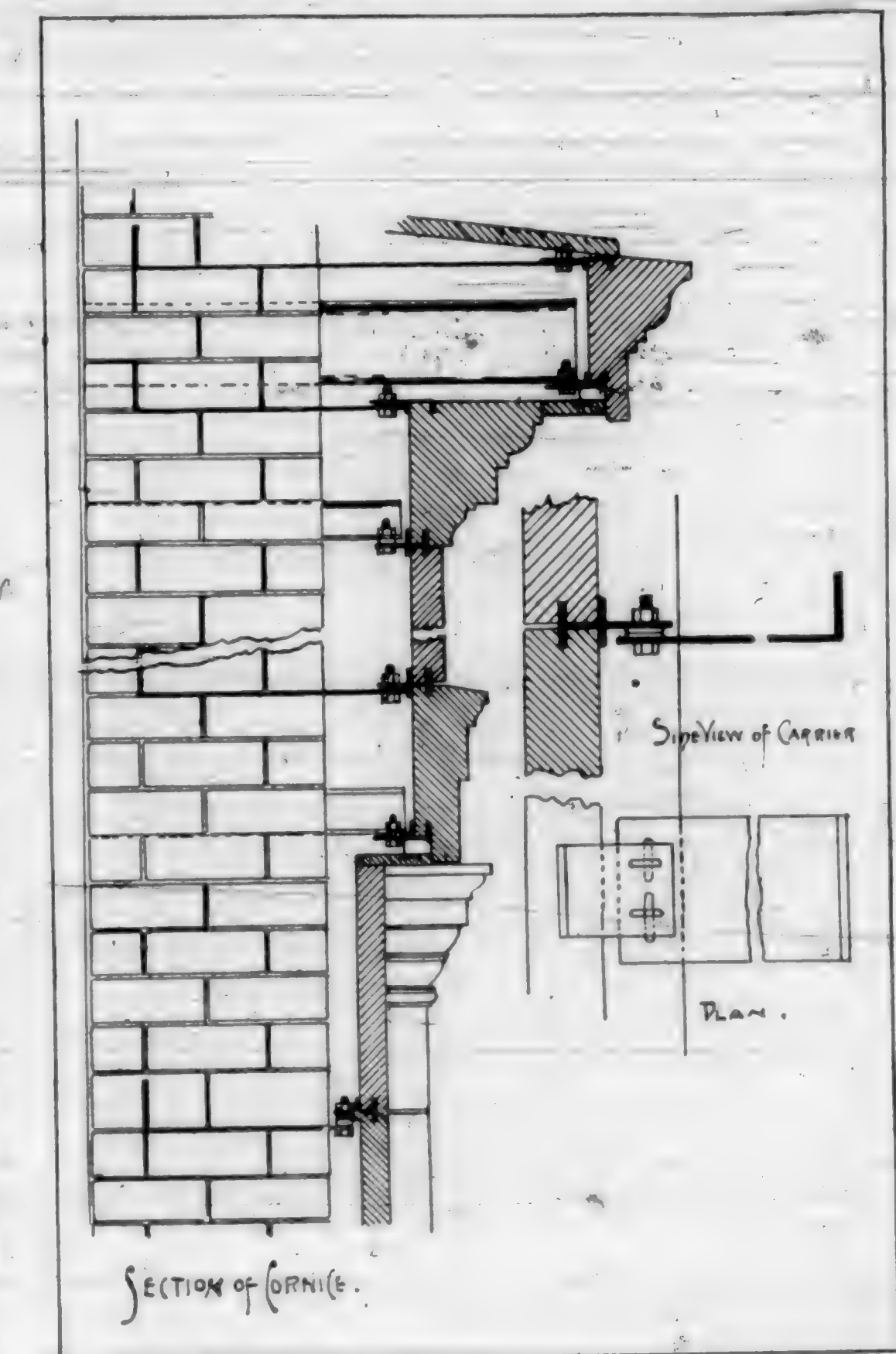
All along the Grand Canal in Venice, we find veneer construction from one to three inches in thickness of marble and sandstone in palaces, dating back as far as the Eight century.

The Milan Cathedral may be mentioned as a notable example of marble veneering. In parts of the building, marble was used in heavy structural form, while later, from economical reasons, veneer construction on brick walls, was substituted, and the building so completed, and this, where marble is cheaper than in any part of the world.

Passing now the economical use of costly or choice material, I will attempt the substantiation of my conviction of the superiority of the released ashlar form of construction. To make this clearer, let us separate the necessary elements of a wall—strength, rigidity, fire resistance and architectural character.

Assuming the wall to be of proper construction being without connection structurally with the ashlar facing—it seems clear that it may be demonstrated to be more perfect than a wall of composite character, say than a wall of bonded brick and stone masonry. This means, of course, where there is limitation of cost and of occupied space.

I trust I shall not be severely criticized when I claim that a wall of given dimensions, carried to a considerable height, is a more reliable an certain construction if of solid brickwork of good character, than if of bonded brickwork and stone, by reason of the wide variation of the crushing resistance of brick and stone, and of brick and stone bonded together; and, also by reason of unevenness in settlement due to the greater number of mortar joints in the brickwork than in the stonework. The crushing resistance of brickwork, we may take at from 300 to 1000 lbs. per square inch; that of the ordinary sandstones of this coast varying according to authority from 1500 to 10,000 lbs. per square inch.



I submit to you the difficulty of a satisfactory adjustment of this variation of strength in a wall which is built as a unit, and I submit that if the adjustment is not perfect, that there can be no integrity in the wall.

I will not limit the comparison of the strength of a mixed brick and stone structure to the crushing resistance, but will risk criticism again in claiming a great degree of strength and permanence from any point of calculation for a wall of uniform material.

The California Hotel and Theater Building is an illustration to which I will refer, with some difference however, as I realize that to account for this error in construction, there must be several views and differing versions, but from no standpoint can the failure be made pardonable. There is

error in calculation, error in choice of material, error in adjustment of incumbent weight, or error in workmanship by stone cutter or by setter, and although I do not suggest the shirking of either question when circumstances demand such a structure, I do, without hesitation call your attention to the much more simple solution of each and every one of these features in the use of a wall of uniform material, *i. e.* brickwork and a released facing.

In question of rigidity in emergency, such as vibration caused by heavy traffic, or, the more severe strain imposed by the shock of an earthquake, I believe that investigation will again reveal the superiority of this construction.

The settlement of a wall of brick or of masonry is one of the vital, if not most vital considerations of such work. This natural settlement or contraction has been estimated in average work to be sometimes as much as $\frac{3}{4}$ of an inch in ten feet in height, and every engineer, architect, superintendent of construction and builder, knows the care to be exercised in the construction of the parts of the work contingent upon such settlement, while the work is in progress. It does not require the consideration of a very high building to find this settlement to be of much moment. This settlement, if established that it exists, must be provided for somewhere or somehow. It cannot be ignored; if it exists, it must be traced in its effects or failure in some part of the structure is certain. If this be applied to a brick wall of even and defined strength, it is in itself serious; if applied to a wall of two different materials of differing strengths, it becomes worthy of most careful consideration. It must be admitted that the releasement of the facing absolutely solves this problem. The walls are carried to their full heights, almost the entire weight of the building is imposed, and the settlement or contraction has taken place before the ashlar is set.

The question of the prevention of dampness in walls of buildings of brick, or of brick and masonry has received your attention too often to require hardly a mention. I will confess to surprise but recently—in reading of the use of hollow bricks in the walls of the Parthenon, built 430 years before Christ. The reflection, therefore, that allowing the absorption of a common brick to be one pint of water that the walls of the Mills Building, in this City, might if exposed on all sides through their whole length might absorb no less than 420,000 gallons of water or 1680 tons, emboldens me to claim the overcoming of this fault of an ordinary wall as a third feature of advantage. Sandstone of the average density is hardly less absorbant than brick.

I will ask here, if the exact computation of the parts and functions of the parts of a modern structure, this additional weight should be ignored? I fear it often is. We are all familiar with a number of expedients, of forms of construction, devices is wall anchors, etc., aimed at the releasement of the outer four inch facing of a brick wall, and for the purpose only of protecting the inner or structural wall from the accumulation or absorption of dampness, and I believe that within a few years, that this form of construction has been recognized as the most successful, in fact the only form certain of the accomplishment of the purpose.

By the provision of an air space, I cannot but feel convinced that much will be accomplished in the equalization of the temperatures, not only in the avoidance of the dangerous dampness, but a building so constructed cannot be so rapidly affected by the changes of temperature in the outside air. I submit that if this can be admitted, it is a con-

sideration of importance in climates demanding the heating of buildings at great expense.

In the question of fire resisting qualities, I think I can again demonstrate superiority through the space of air between the structural wall and the ashlar facing, and suggest that until the outer facing has been destroyed and fallen off, the wall itself remains cool, and unaffected by the heat. With reference to the facing as a protection against fire, certainly much depends upon the selection of a material of superior fire resisting quality.

I may suggest in the event of a partial destruction by fire of a building so constructed, the possibility of making repairs without the total demolition of the wall, and here I will pass the reviews of the practical structural functions and will conclude with a few words on the resultant features of rapidity of construction and economy of proper area.

No general estimates can be made of either of these features—the amount of time which may be saved or of the saving of space occupied by walls—this will require special comparison. That such construction may be rapidly prosecuted is evident, the walls being carried to their full height without interruption, without being subject to delay in the preparation of the material for the facade, in which, whether of brick and terra cotta, or brick and stone, may usually be found the cause of delay, consequent upon its more elaborate character and the slower process of ordinary construction, the building being under roof and inclosed, the prosecution of the work of the interior is made entirely independent, and may be begun at a much earlier period.

Continued in February number.



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.

HARRISON School, Oakland, Cal., W. J. Cuthbertson, Architect. Plans in March No. of '93.

"LITTLE JIM" Ward of Children's Hospital, A. C. Schweinfurth, Architect.

RESIDENCE of Edward Coleman, Esq., W. H. Lillie, Architect.

STOCKTON Library Building, J. C. Pelton, Architect.



RESIDENCE OF EDWARD COLEMAN, ESQ.

W. H. LILLIE, ARCHITECT.

CALIFORNIA ARCHITECT AND BUILDING NEWS.
SAN FRANCISCO.

VOL. XVII. No. 1. JANUARY 1896.



"LITTLE JIM" WARD OF CHILDREN'S HOSPITAL.
A. C. SCHWEINFURTH, ARCHITECT.

CALIFORNIA ARCHITECT AND BUILDING NEWS.
SAN FRANCISCO.

VOL. XVII. No. 1. JANUARY 1896.



HARRISON SCHOOL, OAKLAND, CAL.
W. J. CUTHBERTSON, ARCHITECT.

CALIFORNIA ARCHITECT AND BUILDING NEWS.
SAN FRANCISCO.

VOL. XVII. No. 1. JANUARY 1896.



FREE PUBLIC LIBRARY, STOCKTON, CAL.
J. C. PELTON, ARCHITECT.

CALIFORNIA ARCHITECT AND BUILDING NEWS.
SAN FRANCISCO.

VOL. XVII. No. 1. JANUARY 1896.

ANNUAL SUMMARY OF BUILDING OPERATIONS.

IN the following table we present the number and value of buildings erected in San Francisco during the past year, as shown by the contracts filed at the City Hall.

FOR FIRST SIX MONTHS.—1895.

1895	No. of Buildings	No. of Contracts	Brick Building Value.	No. of Buildings	No. of Contracts	Frame Building Value.	No. of Buildings	No. of Contracts	Alterations & Additions Value.	No. of Buildings	No. of Contracts	Total Value.
Jan'y	12	3	\$ 50,025	31	33	\$ 148,880	4	4	\$ 20,847	37	40	\$ 218,732
Feb'y	10	9	59,336	38	42	122,890	6	6	12,071	51	57	191,287
March	10	9	170,489	76	81	208,081	9	11	17,418	90	101	395,988
April	10	9	155,333	57	69	274,080	24	24	37,411	88	102	466,824
May	10	9	36,043	85	90	393,037	10	19	33,973	107	116	483,063
June	10	9	74,775	67	85	288,791	11	11	21,912	80	101	385,178
Total	72	62	\$ 498,001	254	400	\$ 1,435,740	72	75	\$ 193,332	453	517	\$ 2,125,082

FOR SECOND SIX MONTHS.—1895.

1895	No. of Buildings	No. of Contracts	Brick Building Value.	No. of Buildings	No. of Contracts	Frame Building Value.	No. of Buildings	No. of Contracts	Alterations & Additions Value.	No. of Buildings	No. of Contracts	Total Value.
July	11	17	\$ 151,362	84	90	\$ 287,947	15	17	\$ 182,283	110	124	\$ 601,572
Aug	5	10	133,717	100	111	476,898	13	13	49,244	118	134	679,839
Sept	5	10	31,633	59	72	200,433	8	8	33,012	72	90	355,078
Oct	9	15	40,000	38	56	254,290	26	26	98,811	63	97	398,161
Nov	12	14	98,136	25	36	101,620	9	10	28,128	46	54	277,814
Dec	15	17	163,218	37	39	135,428	8	8	16,165	60	64	266,686
Total	67	83	\$ 638,176	343	404	\$ 1,546,486	79	82	\$ 387,633	409	509	\$ 2,574,150
G'd Total	84	125	\$ 1,134,177	687	804	\$ 2,982,226	151	157	\$ 580,965	922	1086	\$ 4,699,235

To this amount should be added the further estimated sum of \$500,000 where costs have not been given, which would make the total \$5,199,235.

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

1880—	397 engagements, value.....	\$1,754,433
1881—	533 " "	3,799,732
1882—	785 " "	3,896,212
1883—	803 " "	5,261,689
1884—	1,127 " "	6,202,807
1885—	1,457 " "	7,043,999
1886—	1,148 " "	6,401,669
1887—	1,093 " "	6,605,054
1888—	891 " "	6,244,220
1889—	1,081 " "	7,500,000
1890—	1,037 " "	7,095,013
1891—	1,162 " "	6,946,056
1892—	920 " "	5,856,341
1893—	905 " "	3,962,532
1894—	947 " "	4,529,839
1895—	1,086 " "	5,199,235

COMPETITION.

ANNUAL COMPETITION FOR THE GOLD AND SILVER MEDALS OF THE ARCHITECTURAL LEAGUE IN CONNECTION WITH THE ANNUAL EXHIBITION OF THE ARCHITECTURAL LEAGUE OF NEW YORK.

CONDITIONS FIRST:—The Competitors must be residents of the United States, and under the age of twenty-five.

SECOND:—The drawings shall be made in conformity with the following programme, and entirely by the hands of the Competitor.

The awards will be made by the Committee on Competition and Awards acting as a Jury, and their decision will be rendered on or before February 13, 1896.

The competitive drawings will be hung at the Exhibition, the first and second prize drawings being so indicated, and these latter shall become the property of the League.

PROGRAMME—THE PRINCIPAL ENTRANCE OF A TERMINAL RAILROAD STATION.

The station is located at the junction of three main streets of a city of first importance, in a "round point," the principal entrance facing one of them, and the station property being bordered by the continuation of the other two.

The line of the building is set well back from the street, giving ample space for driveways arranged so as to accentuate the entrance, steps, etc., for travelers arriving on foot. The main floor of vestibule must be located at about grade level. The length of front over all, as shown on diagram, is 200 feet. The cost is left to the discretion of the designer.

Only the entrance with preceding driveways, ramps, etc., with indication of main vestibule, shall be shown on plan and elevation.

The drawings will be placed on two sheets 26" by 39"; one sheet containing a section and elevation at $\frac{1}{8}$ " scale and plan at 1-16" the other a $\frac{3}{4}$ " scale detail, with cast and rendered shadows.

All drawings are to be delivered flat, under a non-de-
 plume, on or before February 6, 1896, at the League Rooms; charges prepaid.

COMMITTEE: JOHN GALEN HOWARD,
 ALBERT L. BROCKWAY,
 THOMAS HASTINGS, Chairman.



THE GUILD OF ARTS AND CRAFTS.—The interesting exhibition of Books and Printing under the auspices of the Guild of Arts and Crafts is open to the public at 424 Pine street.

OAKLAND'S EXPOSITION.—Oakland has just closed one of the most successful Expositions on record. Gotten up only in three weeks it was engineered by good business men and was not only successful in a pecuniary sense but was in the way of exhibits an exhibition of the enterprise and capacity of Oakland and its environs which surprised all that had the privilege of seeing it. It was successful in every way and has given such a stimulus to Oakland and its business interests that its managers have decided to make a permanent affair of it and will soon get to work to make a permanent building for all such occasions as have just past.

The directors of the concern were:—M. J. W. Nelson, M. J. Keller, Geo. Roeth, Theo. Gier, Fred Becker, Ely Buswell, F. W. Spiars and Wm. Rutherford; Craigie Sharp, Superintendent.

STUDENTS NOTICES.—Mathematical class of Mechanics' Institute, 31 Post street, San Francisco. Sessions: Tuesday and Friday evenings, 7:30-9:30 P. M. New term begins January 6 and ends June 27, 1896. Studies: Algebra, Geometry, Trigonometry. 2 The application of Mathematical principles and rules to the solution of problems in mechanics, electricity and advanced commercial calculations.

Any student is permitted to make such selections from the above list of studies as he may consider profitable and useful for himself. Students desiring it, will be given an opportunity to review and extend their knowledge of arithmetic and to learn how to apply its rules to practical examples in mensuration of plane and solid geometry. For further information apply to the Instructor in charge of the class.

BOOKS AND PERIODICALS.

A text book of PLAIN LETTERING by Henry S. Jacoby Ass. Prof. of C. E. in Cornell University.

This book will be found quite a help to draftsmen. It goes thoroughly into the methods of artistic and scientific letter making—and is not cumbered with the large amount of so-called ornamental lettering which compose the major portion of old fashioned works on this subject. It is welcome if only for the indication it gives of the adoption by the modern draftsman of plain readable letters instead of the almost undecipherable lettering which used to abound on Architectural Drawings.

The BROCHURE Series of Architectural Illustrations—published monthly by Bates & Guild—has every month a very useful and excellent series of half-tones of Architectural Subjects of use to the architect and draftsman.

LIPPINCOTT'S for January among other good things has an article on "Architecture in America: a Forecast" by John Stewardson, the first of a series of papers on a subject which now holds a prominent place in public interest—and so far seems well and justly handled by the author.

The following criticism on the present rage for tall buildings seems *à propos*:

If we look at the business buildings of Europe and America we find a difference just as striking as in private houses. In England the buildings are not very high, and are cut up into a multitude of small parts following the same styles that are used in country houses. There is little breadth of treatment, little grasping of what is known as the *grand parti*. On the Continent we find the style of the period used for business buildings as well as for everything else. The treatment is broad but monotonous. The buildings are generally studied as a whole, well planned and well proportioned. There interest ceases, the detail being, as a rule, crude and unfeeling, in this respect materially different from that across the Channel. As for business buildings in this country, all the world knows what they are. There is very little good architecture about them, but a great deal of good engineering. Just now it is very much the fashion to praise the huge steel cages with their walls carried on the beams from floor to floor and the weight concentrated into a few vertical shafts, and they are unquestionably admirably adapted to their purpose, but, with very few exceptions, they are not architecture. There is not much more architecture in building a tiresomely long row of offices or apartments, all of exactly the same height and all devoid of any kind of treatment, one above the other, then there is in placing them side by side like any row of brick buildings. Indeed, the architects of some office buildings are men who have never given thought to the principles of proportion, though of course it would be most unjust to the architects of the greater number not to acknowledge the ingenuity and skill with which they have grappled with an entirely new problem; while as for the structural iron-work, it is often as good as can be imagined. From an architectural point of view the greatest drawback to these disproportionate structures—and it is a very serious one indeed—is the fact that they dwarf public buildings, churches, and everything of a monumental character around them, utterly destroying restfulness and scale and marring the general appearance of a city beyond repair. * *

The phenomenal amount of youngmen now turning their

attention to architecture as a means of livelihood is remarkable and is alluded to in the following extract. The author however gives no indication as to what shall be done with these students when they become full blown architects:

"Lawyers and doctors tell us there are so many law and medical students that the professions will be scandalously overcrowded in the next few years. Painters deplore the swarms of ambitious young men in the studios, and assure us there will be no room for them in the future. As for writers, they lament about the overstocked condition of the literary market until one is quite tired of hearing about it.

It is therefore with some trepidation that I make the easily substantiated statement that the increase in the number of students in these callings is small compared with their increase in that of architecture. About fifteen years ago, for instance, there were sometimes half a dozen Americans studying in Paris, sometimes one. For the last five years there have been from forty to sixty, while Americans have been frequenting, besides, the schools of Berlin, Vienna, Florence and Rome. To take an example nearer home, six years ago the long-established School of Architecture of the University of Pennsylvania contained two students: this year there are over a hundred; and so it goes, from the Atlantic to the Pacific. Moreover, this increase in numbers does not include the men who are getting their training in offices without going to the technical school at all. * * *

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.

ESTOPPEL TO DENY VALIDITY OF BOND.—Where a bond given to discharge a mechanic's lien is treated as valid by all the parties, and the lien is discharged, a surety cannot, in an action on the bond, deny its validity.

Moller v. Youmans, Common Pleas of New York City and County, General Term. 34 N. Y. S. Rep. 140.

VENUE IN MECHANIC'S LIEN CASES.—Under Pub. St. c. 191 sec. 11, providing that a mechanic's lien may be enforced in a district court, the petition must be to the court within whose jurisdiction the land lies, irrespective of the residence of the parties; and the only effect thereon of St. 1893, c. 396, revising and consolidating the laws relating to district and police courts, was to increase the amount within which the latter courts have jurisdiction.

Boyle v. Gould, Supreme Judicial Court of Mass. 41 N. E. Rep. 114.

MECHANIC'S LIEN—ENFORCEMENT.—Under the statute, giving a mechanic's lien upon the building to workmen, which they had helped to erect, "and upon the interest of the owner in the lot of land upon which the same is situated," a lien cannot, at the option of the holder, be established on a part only of the whole lot.

Whalen v. Collins, Supreme Judicial Court of Mass., 41 N. E. Rep. 124.

WHAT CONSTITUTES SAFE PLACE FOR SERVANT TO WORK.—A heavy piece of flooring, standing on edge near the place where men were working, was supported as could be plainly seen, by other pieces. The contractor placed a sufficient number of competent men at work moving the flooring and putting it in place. They removed the supporting piece first, and the other piece fell on and killed one of the men. The contractor was not chargeable with negligence in not providing a safe place for him to work.

Smith v. Empire Transp. Co., Supreme Court of N. Y., 35 N. Y. Supp. 534.

CONTRACTS IN RESTRAINT OF TRADE.—An agreement by the members of a national association of master plumbers to withdraw their patronage from any dealer selling supplies to others than master plumbers is not unlawful, even though "master plumbers" be construed to mean members of such association.

Macauley v. Tierny, Supreme Court of R. I., 133 At. Rep. 1.

SIXTH WARD SCHOOL, OAKLAND.

THIS School House lately completed is situated at the corner of Fourth and Harrison streets, Oakland. It is a four room school with ten foot basement, of brick and stone. The basement contains play rooms for the children in wet weather, water closets and the heating furnaces. Exclusive of the four class rooms, the building contains a principal's room, store room, lunch room and kitchen.

The Architect was W. J. Cuthbertson, the superintendent W. Hopkirk and the whole was under the charge of the Oakland Board of Public Works consisting of Mayor Davie, City Attorney Piersol and City Engineer Wilson, and carried out to the satisfaction of the school board, Mr. Ford the School Director for the ward in which the building is situated, giving the matter a good deal of personal attention. The total cost of the building was \$35,000.

The Brick work was carried out by the well known and old established firm of Remillard Brick Co., of Clay and Second streets, Oakland. The fronts were faced with their stock brick which, when pointed up with red cement and cleaned down, makes a brick front which leaves nothing to be desired.

The Carpenter work was done substantially, conscientiously and carefully by R. Weeks & Son who have made a good reputation for themselves since they have settled in Oakland; they have been particularly successful in school house work, having only a short time ago completed the Redwood City High School. Besides their work in Oakland, Alameda and Berkeley they can also point with pride to the following work done by them in other parts of the Continent—Garfield University at Wichita, Kansas, costing \$270,000; Clements' Block in the same town and several large residences. Mr. Weeks is a man thoroughly experienced in his business and thoroughly reliable. The firm has lately opened a shop in the Turn Verein Building on Webster street near Seventh, Oakland.

The inside finish of the building is of white cedar and was put up by the above in a manner worthy of the way in which it was worked by Burnham, Standeford & Co., the old established firm of millmen, running the Pioneer Oakland Planing Mills, situated on First, Second and Washington streets, Oakland. The finish was thoroughly seasoned in their Patent Lumber Dryer—which is built on the latest improved method. The heat is introduced by pipes under the open floor, the hot air is circulated and regulated by an arrangement of flues and dampers—the moisture as it is driven out of the lumber is condensed on brass plates which form the outside enclosure of the dry houses. The drops of water descend and are caught in a gutter and carried to outside of building. In seven days the stock is thoroughly dry and by this system of drying the sap is solidified so that no shrinking nor swelling is possible and is the only process that successfully kiln dries redwood without checking, crystallizing or case harding. The capacity of the dry house is 15,000 feet and it cost \$1500 to put up. It has now been in use nine months and it is found to work most successfully both for hard and soft wood.

Over the kiln is placed the veneering room, kept at a proper temperature where all the gluing and veneering is done. It is fitted up with presses for gluing veneer and

everything complete, so that this firm is able without dispute to get out work equal to any of the Eastern houses both in dryness and finish.

The Lumber was supplied by the Puget Sound Lumber Company whose extensive yards and wharf are situated at the foot of Washington street, Oakland, where there can always be found a large assortment of well seasoned lumber such as went into the School House.

The stone work, of which there is quite an amount in the shape of cornices, copings, columns and arches, trimmings and quoins was executed by James Rea. All but the columns is finished in "rock face" and all is carried out in such a manner that any laudation seems superogatory. The Romanesque ornament of the freezes of the cornices, the capitals and other carved work are executed in the best manner of that art, and leave very little to be desired. Mr. Rea also carried out the stone work of the Oakland Gas Company's Office Building and the Native Son's Hall, Delmonico's and interior of Church of the Advent, etc., in San Francisco. The firm is now incorporated under the name of the Rae Building and Contracting Co., Jas. Rae, President; stone yard Seventh and Townsend St, San Francisco.

The painting and polishing is carried out by Messrs. Doody & Hooley. "Good wine needs no bush," and this old established firm needs no puff. All the interior cedar finish was done in natural finish, and Doody & Hooley by using the best materials and good workmen have made a thorough success of its appearance, and the owners have the satisfaction of knowing that a good job of mill work was not spoiled by a poor job of polishing, and the painters have the satisfaction of knowing that this job is not hurting the reputation which they have maintained in Oakland and vicinity ever since 1865. It may be mentioned *en passant* that Miles Doody, the senior partner, gave evidence while he held the position of Assistant Engineer of the Fire Department that he made as good a fireman as he did a painter and we presume that is the way with him whatever he takes hold of. The firm has done so much good and well known work scattered around Oakland and its vicinity, that if would be useless to attempt to particularize so we will not attempt to enumerate.

The building is completely equipped with electric bells, speaking tubes, etc. Every class room is connected by these means with the principal's room. All this work has been thoroughly installed by J. A. McCarl & Co. of 365 Twelfth street, Oakland—whose reputation is such that he controls a large electrical business as well as a very successful business in steam and hot water heating, galvanized iron work, tin work, locksmithing and cognate branches. This firm installed the most complete return call system on the Coast in the Redwood City School House and intalled electric systems in Judge Lair Hill's residence at Berkeley, Geo. Garrett's on Oakland Heights and other large residences.

The Plaster Decoration was ably carried out by Jno. Conley of 362 Ninth street, Oakland, who has now taken the front rank in that kind of work, as witness the Diploma he has just received from the Oakland Midwinter Exposition of 1895, for the best exhibit of Plaster Decoration. The elaborate outside decoration in plaster of the

Porter School House in Alameda, consisting of panels, medallions and figure decoration is a monument to Mr. Conley's ability in that line, the style showing that he only employs the best artists and modellers. He is now supplying the Keed Building on Clay between Eleventh and Tenth with ornamental plaster work, and has also a large clientele in San Francisco.

The gutters of the roof are all of copper which was laid in his usual thorough manner by Philip Hamnford whose shop is at 318 Larkin street, San Francisco, to which lately he has made considerable addition to accommodate his increasing business and the Oakland Metal Works which he has now combined with his city shop. The galvanized iron balcony on the front of the building used to obtain access to the flag pole—and its ornamental balustrade was carried out artistically and adds to emphasize the central feature of the front facade of the building. Mr. Hammond is now employed on the copper and lead work for the large residence for Mr. Spreckles on Van Ness Ave., and has completed satisfactorily the work on the two Spreckels' Buildings on Market street, San Francisco.

The plumbing work is all first-class, exposed work and together with the complete and extensive system of sewerage was done by the old established firm of Dalziel & Moller, a firm which has grown up with the town. Their work was entirely satisfactory, as much so as in the New City Hall of Alameda, another public building upon which they have lately been engaged. Dalziel & Moller have a large establishment in San Francisco which they confine entirely to wholesale plumbing goods and where they succeed in keeping the confidence of the plumbers and gasfitters of the State and keep a full stock of goods requisite for their business. The Oakland shop is at the corner of Thirteenth and Broadway, and the San Francisco one at 554 Mission street.

Special attention has been given to the system of warming and ventilating, the crowing feature of which is to furnish a continuous supply of fresh air. The system in this building has been installed in a systematic and compact way and without making projections or angles in class rooms.

The minimum capacity of the plan, as shown by a test, makes a complete change of air in the rooms from four to five times an hour, while the maximum capacity, as shown by air meter, was over 2,000 feet of air supply per minute, or an equivalent to over eight changes of air in room per hour. Tests as to the uniformity of the heat, the ease of management and economy in fuel has exceeded the Guarantee of the company, making a most successful and economical combination. The sanitary closet system in the basement of the building is a valuable feature, both from its freedom from disagreeable odors and its automatic operations. As a result of the successful working of this system, the company are now executing contracts from Pasadena, California, to Portland, Oregon. The following partial list of buildings show where the heating and ventilating or sanitary flushing closets have been introduced within the last year or is now being introduced:

San Francisco, Cal.—Haight Street School, Richmond School, Sutro School, Douglass School; Pasadena, Cal.; Watsonville, Cal.; Redwood City, Cal.; Alameda, Cal.; Redding, Cal.; Medford, Ore.; Marshfield, Ore.; Portland, Ore.

"LITTLE JIM" WING OF CHILDRENS' HOSPITAL.

THE funds for building the "Little Jim" wing of the Childrens' Hospital were collected during Christmas week 1894. The school children throughout the State with their entertainments and contributions and a committee of ladies who published the Christmas *Examiner* were the chief agents in getting the necessary money. The papers sales and advertisements cleared nearly \$13,000, and the sums brought in from other sources netted an equal amount. The money was banked by *The Examiner* and a check for the total was made payable to the order of the Lady Managers of the Childrens' Hospital and Training School for nurses.

As soon as practicable thereafter designs for the new building were drawn by architect Schweinfurth who made a careful study of all the plans of the latest hospitals in Europe and America. Then he endeavored to embody all their best points in the plans of the "Little Jim" ward. It has all the latest appliances and conveniences in a hospital way.

December twenty-first last the building was dedicated with appropriated ceremonies and formally turned over to the Board of Managers of the Childrens' Hospital.

Thos. Butler did all the work on the building, outside of the plumbing. Mr. Butler has been identified in his long career with a large number of the most important buildings in San Francisco and is at present employed on the Grose Building on Mission near Main streets and the Annex to the Park Museum.

The plumbing which of necessity was required to be of the best was done by W. F. Wilson of 104 Stockton street, San Francisco. It is all open work; the bath tubs are Mott's movable, porcelain, rolled rims and are mounted on iron rollers with rubber tires so that they can be rolled alongside the bed of the little sufferer and used there. In the floor of the lavatory, which is all of marble including partitions, is a cesspool connected with a waste for the purpose of emptying the tubs. The heating is done by one of Mott's Hot Water Heaters. Mr. Wilson has in charge the plumbing for the Clara Spreckels' residence.

RESIDENCE FOR EDWARD COLEMAN, ESQ.

THE fine residence on the corner of California and Franklin streets, lately completed, is a frame building with a concrete basement in the Colonial style, and cost about \$30,000—W. H. Lillie is the architect.

In the basement, which has a cement floor all over, are the heating rooms, fuel rooms and other rooms which usually go in a basement. The first floor contains a study, parlor, sitting and dining rooms and kitchen and appurtenances with spacious halls. The second floor contains five bed rooms with private baths and the attic five bed rooms.

The first floor is finished in oak and mahogany except the parlor which is in cream and gold. The entrance vestibule and doors are of oak—and there is a fine flight of marble steps leading to the same. The cove of the parlor is in ornamental plaster work and hall and dining room have oak beam ceilings.

The general contract was executed by Messrs. Farrell & Bell, one of the oldest firms of builders in the State, having been established in 1853, and ever since keeping up an unsurpassed record for good and honest work. They are equally at home on solid brick buildings and on fine residences. Of the first class they can point to the Odd Fellows Hall Building, Heller Building on Sansome street, etc.,

and of the latter to the residence of Wm. H. Howard at San Mateo and the residences of the Schwabacker Bros., Henry E. Bothin, A. P. Hotaling, J. C. Coleman and others of San Francisco, and this building, their latest, shows equally bestowed upon it the same care and knowledge displayed in their former achievements.

L. B. Sibley did the grading of the lot of which there was considerable, costing over \$800, and there is nothing in his line of business that he is not prepared to do from large to small and in a workmanlike manner. He is one of the directors of the Builders' Exchange.

All the concrete work including the concrete basement walls which are lined and molded in imitation of rock face stone, was done by Mr. Goodman of Nevada Block, the character of whose work is too well known to need any laudation.

The painting and polishing was done by J. P. Fraser who is celebrated for fine work in his line. The work here is done in his usual first class manner—the oak and mahogany work being so finished and polished that not only is the appearance good but its lasting capabilities is without question. Mr. Fraser having done the work on most of the large residences and buildings in San Francisco it is useless to try to enumerate them, but they are all lasting records of his skill in his art.

The electric work, consisting of a complete system of incandescent lighting, electric gas lighting and electric bells was installed by the Will & Finck Co., the well-known firm of electrical contractors. One of the principal features of the installation is the use of the Sechrist Automatic Switch whereby the Incandescent lights are operated from a nickel plated press key of the same kind and style as for

electric gas lighting. Another feature is a double system of annunciators whereby a call from any part of the house is indicated simultaneously in the kitchen and in the servants' quarters in attic. The neat and workmanlike manner in which the contract has been carried out reflects great credit on the Will & Finck Co. We may mention that they are now installing the extensive electric work of the new Safe Deposit Building.

The plumbing of the house is one of the most complete and modern; all the bath tubs are Mott's Porcelain Rolled Rim Tubs, and are supplied with instantaneous water heaters—all the washstands and baths have shampoo attachments and so on throughout the whole job. The work was done in satisfactory style by Harry Williamson of 413 Sutter street.

The Heating apparatus was installed by W. W. Montague & Co., and their "Commander" Heater used. It is needless to say that their name is sufficient guarantee of the capacity and long livelyhood of their heating arrangements. They also supplied some of the artistic mantels in the house and in this regard it may be said that it is questionable whether the stock of fine mantels on exhibition at their show rooms, 309-317 Market street can be equalled on the Coast.

The three large stained glass windows lighting the staircase were designed and manufactured by Hausmann Bros. They cover a surface of seventy square feet and are designed in the modern Rococo style now so much in vogue in the East, replete with tender tints and delicate effects—the ornamental part entirely in cut glass. The centre panel is a floral piece with a bulrush motif, richly shaded.

Mr. S. Kellett of 28 Ellis street carried out the Plaster Decoration.

BUSINESS MOSAICS.

The Selby Smelting and Lead Company has furnished to R. A. Vance, for use in the Parrott Building, a large number of three inch and four inch lead traps and bends in regular and heavy weights, these goods are drawn on a new hydraulic press, lately imported and in use in their works at First and Howard streets, and are much superior to those which are cast from iron or brass as the lead is compressed solid and is perfectly smooth while brass and iron may have pin or blow holes and the inner surface of the brass or iron when cast is rough and catches and retains the filth, whereas, the lead being smooth as a mirror, flushes out and makes a sanitary fixture; special lengths and extra weights drawn to order.

Joseph Budde commenced '96 with an original Calendar in which a beautiful female about to strip for the bath is placed in juxtaposition with his latest No. 1 Cyclone Water Closet—hyperbolically indicating thereby that that sanitary appliance keeps as sweet and clean as its neighbor aforesaid. Anyone that can conceive such beautiful relations deserves recognition on all sides. Another calendar from the same firm represents an innocent child wrapped up in her bathing robe just coming from the bath. We suppose typical of the innocency of any obnoxious gases of the adjacent Jos. Budde's No. 1 Cyclone.

A Steiger Sons—Architectural Terra Cotta can be ordered from their San Jose office as well as from the main office in San Francisco, 206 Market street. Remember that as well as Architectural work, this firm can supply anything in the way of stone-ware, such as flower pots, sewer pipes, and an endless variety of goods in this line.

The San Francisco Lumber Co., wholesale and retail; principal office foot of Third street, uptown office 405 Montgomery street corner of California. Mr. J. N. Curtis, manager. This firm is almost sure to be able to supply anything in the way of lumber that you may require.

Facts about anything are what we all want—but facts about paints, are of interest not only to the householder but to the contractors and builders in general.

Don't forget that by applying to W. P. Fuller & Co., you can receive facts about paint, but a guarantee of absolutely pure and satisfactory paint. See their advertisement on the last page of this Journal.

Those in want of the best window cord should order Samson Spot Cord, if you are in doubt, order sample from Samson Cordage Work, 115 Congress street, Boston, Mass.

CITY BUILDING NEWS.

Baker near Page. Two-story and basement; owner, B. Griffin; architect, V. Krolow; contractors, Williams & Foster; signed, Dec. 20; filed, Dec. 21; cost \$4100.

Brannan and Langton. Two-story frame; owner, R. P. Merillon; contractor, W. W. Redmill; signed, Dec. 19; filed, Dec. 19; cost \$4485.

Bryant and 5th. Two-story brick, mason work; owners, Main & Winchester; architect, Henry Gellfuss; contractors Miller & Deek; signed, Dec. 20; filed, Dec. 23; cost \$5049.

Bryant and 5th. Two-story brick, carpenter work; owners, Main & Winchester; architect, H. Gellfuss; contractor, C. Schutt; signed, Dec. 20; filed, Dec. 23; cost \$1875.

Bryant and 5th. Two-story brick, grading, etc.; owners, Main & Winchester; architect, H. Gellfuss; contractor, L. M. Zimmermann; signed, Dec. 20; filed, Dec. 23; cost \$1925.

Broadway near Steiner. Alterations and additions; owner, W. F. Herrin; architect, J. E. Kraft; contractor, R. Currie; signed, Dec. 18; filed, Dec. 23; cost \$2260.

Bush near Scott. Two-story frame; owner, Philip Thorn; architect, H. D. Mitchell; contractor, Ed. Ginley; signed, Jan. 6; filed, Jan. 7; cost \$6215.

California near Laurel. Two-story frame; owner, G. V. Daniels; contractor, A. Paulberg; signed, Dec. 27; filed, Dec. 27; cost \$2515.

Clement near 5th Ave. Frame dwelling; owner, J. King; contractor, A. Jackson; cost \$2500.

Charles and French. Steel bridge; owners, City of San Francisco and C. P. R. R. contractors, Healey, Tibbets & Co.; cost \$5500.

Chit House. Additions to sheds; owner, Adolph Sutro; architect, J. C. Colley; contractors, Campbell & Pettus; signed, Jan. 3; filed, Jan. 4; cost \$3150.

Dolores near 14th. Two-story frame; owner, F. B. Hurling; architects, Martens & Coffey; contractors, Reit & Ahlgren; signed, Dec. 23; filed, Dec. 28; cost \$2875.

Fell near Ashbury. Two-story and basement; owner, John H. Brisling; architects, Martens & Coffey; contractor, C. Schutt; signed, Dec. 20; filed, Dec. 23; cost \$3650.

Fell near Ashbury. Two-story frame; owner, Henry Bohls; architects, Martens & Coffey; contractor, C. Schutt; signed, Dec. 26; filed, Dec. 26; cost \$5060.

Francis near Mission. Cottage; owner, Bertha Wolch; contractor, James McConchey; signed, Jan. 3; filed, Jan. 4; cost \$1150.

Fourth near Clement. Cottage; owner, J. C. Coggin; contractor, E. Ginley; cost \$2500.

Fulton near Devisadero. To build; owner, Mrs. Pauline Casner; architect, W. Koenig; contractor, W. H. Kinread; signed, Dec. 17; filed, Dec. 18; cost \$3050.

Golden Gate Ave. and Pierce. Alterations and additions; owner, Mrs. Elizabeth J. Hulme; architect, C. J. F. Devlin; contractor, Ralph Carey; signed, Dec. 12; filed, Dec. 17; cost \$1925.

Golden Gate Park. Annex to Museum; owners, Park Commissioners; architect, E. R. Swain; mason work, T. Butler; \$6000; iron work, Pacific Rolling Mills; \$1927.

Hampshire near 22d. Cottage; owner, H. Feige; cost \$1500.

Hardy near 10th. Additions and alterations; contractor, Mr. Hayes; cost \$1000.

Hyde near Eddy. Three-story frame; owner, Fannie Cohen; architect, A. J. Barnett; contractor, Joseph Kemp; signed, Dec. 14; filed, Dec. 14; cost \$5645.

Hyde near Eddy. Three-story frame; owner, Fannie Cohen; architect, A. J. Barnett; contractor, Jos. Kemp; signed, Dec. 14; filed, Dec. 14; cost \$5645.

Jackson and Larkin. Three-story and basement; owner, Mary M. Gagan; architects, Shea & Shea; contractor, John J. O'Brien; signed, Dec. 12; filed, Dec. 14; cost \$6817.

Kearny and Post. Alterations; owner, Weil & Co.; cost \$2500.

Lake Merced. Construction of a shaft; owner, Spring Valley Water Works; architect, F. A. Schussler; contractor, A. E. Buckman; signed, Jan. 7; filed, Jan. 11; bond \$500.

Lott near Heights. To build; owner, Margeretta J. Wigg; architect, W. H. Lillie; contractor, Jas. McLean; signed, Jan. 14; filed, Jan. 15; cost \$3374.

Market near 5th. Fixtures, etc.; owner, Mrs. A. M. Parrott; architects, Pissis & Moore; contractor, S. F. Furniture Mfg Co.; signed, Dec. 11; filed, Dec. 17; cost \$6076.

Market near 5th. Hardware, doors, etc.; owner, Mrs. A. M. Parrott; architects, Pissis & Moore; contractor, F. W. Kern; signed, Dec. 12; filed, Dec. 17; cost \$23,450.

Market near 5th. Fire hose, etc.; owner, Mrs. A. M. Parrott; architects, Pissis & Moore; contractor, New York Belting and Packing Co.; signed, Dec. 19; filed, Dec. 20; cost \$1927.

Market and Third. Sustaining division wall; owner, Claus Spreckles; contractor, J. S. Stratton; cost \$1000.

Masonic Ave. near Waller. Two-story frame; owner, Annie G. Coffey; architects, Martens & Coffey; contractor, W. A. Miller; signed, Jan. 11; filed, Jan. 11; cost \$3409.

Noe and Henry. Additions; owner, Mrs. L. Boger; architect, W. H. Armitage; contractor, L. B. Schmidt; signed, Dec. 16; filed, Dec. 18; cost \$2500.

Oak and Baker. Carpenter work on two-story brick and stone; owner, Howard Presbyterian Chapel Society; architects, Percy & Hamilton; contractor, E. L. Brooks; signed, Jan. 3; filed, Jan. 4; cost \$980.

Oak and Baker. Concrete, brick and stone work, etc.; owner, Howard Presbyterian Chapel Society; architects, Percy & Hamilton; contractors, Gilmore & McNinch; signed, Dec. 31; filed, Jan. 4; cost \$4820.

Oak and Lyon. Repairs to partly burnt building; owner, Eugene C. Owles per Columbus S. & L. Society; contractor, G. Massoletti & Son; signed, Dec. 13; filed, Dec. 14; cost \$1995.

Phelan Building. Alterations to front entrance; architect, Wm. Curlett; cost \$3000.

Post near Larkin. One three-story frame eight flats and two two-story frames six flats; owners, G. Berson & A. Cailleau; architects, W. Moser & Son; contractor, J. F. Logan; signed, Dec. 27; filed, Dec. 31; cost \$23,759.

Post near Larkin. Plumbing and gas fixtures; owners, G. Berson & Armand, Cailleau; architects, W. Moser & Son; contractor, R. Rice; signed, Dec. 27; filed, Dec. 31; cost \$2995. Painting and varnishing, W. Barton; cost \$1775.

Powell and Market. Marble wainscoting; owner, E. J. Baldwin; architects, Percy & Hamilton; contractor, Vermont Marble Co.; signed, Jan. 3; filed, Jan. 7; cost about \$2400.

Sacramento near Webster. Painting and graining; owner, Jacob Rosenberg; architect, C. C. McDougall; contractor, D. Zelinsky; signed, Jan. 3; filed, Jan. 3; cost \$1300.

Second Ave. near California. One-story frame; owner, Julius S. Morris; architects, Hatherton & Ross; contractor, John Sanders & Jas. Button; signed, Jan. 9; filed, Jan. 10; cost \$2200.

Sixth near Brannan. Two-story frame; owners, Scott & McCord; contractor, W. P. Smith; cost \$2000.

Sacramento near Geary. Additions and alterations; owner, Estate of Wm. Shreels; architect, A. J. Barnett; contractor, C. W. Little; cost \$3500.

Treat Ave. near 22d. One-story frame; owner, R. D. Cowan; architect, H. D. Mitchell; contractor, A. Lund; signed, Dec. 19; filed, Dec. 19; cost \$1860.

Twenty-second and Hampshire. One-story frame; owners, Pat. & Nora Hegarty; architects, Townsend & Wynekin; contractor, Jno. Quinn; signed, Jan. 10; filed, Jan. 11; cost \$1040.

Valencia near 16th. Two-story frame; owners, E. Schuntenhaus and John Packwitz; architects, Salfeld & Kohberg; contractor, L. B. Schmidt; signed, Dec. 30; filed, Jan. 2; cost \$7418. Plumbing and gas-fitting, contractor, H. Hufschmidt; cost \$1079. Painting and graining, contractor, J. Quad; cost \$395.

Valencia near 19th. Two-story frame; owner and builder, P. Crichton; architect, Clinton Day; days work; cost \$16,000.

Valencia and 16th. Alterations; owner, W. Ede; cost \$1500.

Van Ness Ave. Washington. Two-story frame; owner, O. H. Greenwald; architect, A. Page Brown; Supt. Mahoney Bros.; days work; cost \$30,000.

Van Ness Ave. near Clay. Plumbing; owner, O. H. Greenwald; architect, A. Page Brown; contractor, R. Rice; signed, Dec. 3; filed, Jan. 2; cost \$2385.

Webster near Broadway. Two-story attic and basement brick and stone residence; owner, Wm. B. Brown; architect, Polk & Polk; contractor, Wm. Bell; signed, Jan. 2; filed, Jan. 14; cost \$16,950.

The California Architect and Building News.

Copyrighted 1895, by the California Architectural Publishing Company.

OFFICE, 408 CALIFORNIA STREET,

SAN FRANCISCO, CAL., U. S. A.

VOLUME XVII.

FEBRUARY 20th, 1896.

NUMBER 2.

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

Published on or about the 20th of each month by The California Architectural Publishing Company. The Stockholders being Architects and others interested in the profession.

SUBSCRIPTION TO THE JOURNAL, \$3.00 PER YEAR IN ADVANCE.

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

W. J. CUTHBERTSON, President. OLIVER EVERETT, Secretary.

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

ADVERTISING RATES:

Space	1 Month.	3 Months.	6 Months.	12 Months.
1 inch.....	\$ 1 50	\$ 4 00	\$ 7 50	\$ 13 00
2 inch.....	4 00	10 00	18 00	35 00
3 inch.....	7 50	18 00	32 00	60 00
4 inch.....	12 50	35 00	65 00	125 00
1 Column.....	20 00	57 50	105 00	200 00
1 Page.....	40 00	110 00	200 00	350 00



It's like "making a purse out of a pig's ear" and an opportunity for the erection of an appropriate Municipal Building will be lost. Those opportunities do not come too often and when they do come those that happen to be at the time don't seem able to grasp the situation.



INCE there has been architecture there have been competitions for architectural work—and notwithstanding all their evils they are still with us. Palliatives of those evils we have some—but these are ineffectual without Legislation and that again must be in accordance with the will of the people or it will be ineffective. Witness the present laws on the

subject on our Statute Book which are practically dead letters.

In looking up what is the best *modus operandi* for a competition for public architectural work we have a mass of opinions and literature on the subject. In conning over all this we find the following principles unanimously agreed to as the conditions of a professional competition:

FIRST—Professional advice in preparing scheme of competition so that it may include all necessary and no unnecessary requirements.

2d.—Explicit instructions as to the number and character of the drawings; which should be in the nature of preliminary sketches only.

3d.—That an expert jury should be appointed to assist the Board in the judgment of the relative merits of the designs submitted and as to their compliance with the conditions.

4th.—Successful architects to have the work at five per cent commission—and premiums distributed to the other competitors in order of merit to the amount of at least one per cent of total architect's commission.

5th.—In large work there ought to be a preliminary and

final competition—the competitors in the last to be paid.

6th—Sufficient time allowed for the proper study and preparation of the plans.

The reasons of calling for these conditions and other remarks elucidating cannot be better given than in the words of some of the correspondents mentioned in our last number.

1st.—In regard to the first and as hints to a professional advisor Messrs. Van Brunt & Howe say:

"Many schemes are made needlessly difficult either by the imposition of requirements which are incongruous, arbitrary or embarrassing, or by the failure properly to define requirements which are essential. An expert advisor would understand how to discriminate between conditions of necessity and conditions of mere expediency or prejudice, so that the latter might not stand in the way of the former. He should so frame these requirements as to give the largest scope to the artistic capacity of the competitors within clearly understood limits and to eliminate all question of doubt as to the conditions. He should cause to be prepared a careful topographical survey of the ground with contours plainly defined, with the character of the natural features, including tree growth, etc., plainly set forth and with photos of existing buildings and surrounding scenery.

"Amounts to be ultimately expended should be considered so that the competitors should be warned against injudicious economy on one hand and injudicious extravagance on the other.

"Style of the architecture should be left to the competitors subject to general specifications as to the character of building materials available, and the character of existing buildings."

One of the correspondents remarks "with State work, politics often enter and some architect with a pull gets some work for the 'institution' and recommends therefore that the stipulations be made severe enough, so that even this sort of man, may not ruin the general effect.

In regard to the second item they remark:

"The scheme should plainly define the character and number of drawings required, and at least in the preliminary competition, the scale of these drawings should not be so large as to invite the competitors to unnecessary elaboration of detail and should, in number, be only sufficient to define the leading points of design."

In regard to the expert jury mentioned in item three, Carrere & Hastings says:

"The judgment of the drawings submitted should be a matter of considerable consequence and should be entrusted to men in sympathy with and capable of fully appreciating the problem.

"Perhaps the most satisfactory suggestion which occurs to us at present would be for the Board to nominate a certain number of lay judges, and for the architects to nominate an equal number of architects, say three at the most, making six in all—and to let them judge the competition."

In the matter of picking out five or six architects to enter a competition and paying them, recommended by some; such action in private work would do very well, but in public work it would leave the Board open to charges of favoritism which it would be desirable not to engender.

The reasons and advantages of a double competition are very justly stated by the editors of the *American Architect* in the following language:

"In case of preliminary and final competition instructions

given should be entirely full and precise in the first competition, but the work required of the competitors should be limited with great exactness to such simple drawings as will be merely sufficient to give to the expert advisor a clear conception of the real form of the competitor's idea.

"The advantage of making the requirements in the first competition simple is as follows:

"It does not impose upon the competitor a really unnecessary amount of work, and it does not bring about that wanton waste of effort, time and money which would be occasioned if a more elaborated treatment were called for.

"In the second place by asking the competitors for a simple treatment, it does not fix in their minds in a rigid and unchangeable form the crude conceptions of the possibilities of the subject, so that they are left with a more open mind and free imagination when the time comes to develop their preliminary idea into the final drawing for the second competition."

To sum up: the general conditions as stated here being recognized amongst architects as just and proper, it only remains to reduce them to explicit and legal language, and get them passed into a Law, of which the justice will be recognized by ordinary capacity and thus may it become an honorable custom amongst all public bodies to adhere to the principles outlined above.



WASHINGTON, D. C., Feb. 4.—In response to a resolution introduced by Representative Loud and adopted by the House, the Secretary of the Treasury to-day sent to Congress the following message:

TREASURY DEPARTMENT, OFFICE OF SECRETARY.

Sir: In response to a resolution passed by the House of Representatives on the 21st inst., requesting the Secretary of the Treasury to inform the House what progress has been made under the act for the erection of a postoffice building at San Francisco and the reason for delay in the prosecution and completion of said building, I have the honor to state as follows:

Upon the passage of said act of March 3, 1893, fixing the limit of cost for the new postoffice, courthouse, etc., the plans and estimates for said work were taken under consideration by the supervising architect. On June 12, 1893, however, the department received a communication from the chairman of Committee on Public Buildings and Grounds of the House of Representatives requesting that no action be taken in regard to the erection of said building on the site which had been selected until the House of Representatives should have an opportunity to enter an investigation in regard to the matter.

In deference to said request, the department on June 23d directed that action relative to the preparation of plans and estimates for the building be suspended until further orders. No further steps were taken until October 5, 1893, when in response to a resolution, the Secretary of the Treasury transmitted to the House of Representatives all the papers relating to the selection and purchase of the site. These papers were retained by the House of Representatives until June 9, 1894, when they were returning to the department.

Early in the Spring of 1894 work on the plans for said building was renewed, sketch plans and estimations were made and approved by the Secretary of the Treasury, Secre-

tary of the Interior and Postmaster-General and the preparation of working drawings entered on, which drawings were sufficiently under way to admit of the invitation for proposals for the work of excavating for foundations when Congress, by the act approved March 2, 1895, directed "that before any work is done upon the building or contract let therefor, the Secretary of the Treasury shall cause to be carefully examined the nature of subsoil and bed of foundation of the site purchased for such building and whether character of the same is proper for building, and what will be the cost of making a foundation and whether the construction of the building shall be proceeded with on said site; and the Secretary of War, upon request to the Secretary of the Treasury, shall detail two or more engineer officers of the army to make such examination," said officers submitted a report on the examination made by them, setting forth the result of borings, etc., furnishing drawings to show the location, etc., of said test pits, and concluding with an opinion that the foundations should be of concrete, and that the proposed building can be safely constructed on the site selected; and further, that no reason is apparent, from an engineering point of view, why erection of building should not be proceeded with.

The officers named estimated the total cost of such foundation as they recommended to be \$30,540. The prosecution of this work thus interfered with its regular course has proceeded as rapidly as the pressure of current matters would allow. The work on preparation of drawings has been resumed and they will be completed and contracts made as soon as possible. Respectfully yours,

J. G. CARLISLE, Secretary.

To the Speaker of the House of Representatives.

It will be remembered that in response to a letter from Judge McKenna an inquiry was made of the supervising architect concerning the plans of the new building. This letter was taken to supervising architect Aiken by Senators White and Perkins and left with that official. After a long talk regarding the proposed building Aiken promised to reply, but after a lapse of a time long enough to have completed the plans of Judge McKenna's courtroom it was thought the supervising architect had forgotten his promise.

So Senator Perkins wrote to him again, recalling the visit and the letter and stating that it having been understood from him that money was necessary to complete plans he would be pleased to be informed of the amount needed to supply the extra help to perfect the plans. Still no answer came. A messenger was sent to Aiken to get from him verbally the figures needed to insert in the bill which Senator Perkins had prepared, designed to supply funds which would enable the Postoffice plans to be complete and work on the new building to be commenced. Aiken promised to reply by letter, but never did so. Other efforts were made to secure data necessary to enable Congress to take action, but Aiken did not reply.

On January 30th, another letter was written by Senator Perkins, in which he called attention to his former communication and to a promise that a reply would be given to the inquiries of Judge McKenna's letter, that an answer might be made to the Judge. It was assumed that Aiken would not be so discourteous as to refuse to reply to the many inquiries made and that the letter had gone astray. This brought forth a reply, but not such as was expected. It was in the form of a letter from Secretary Carlisle, per-

Aiken, in answer to Senator Perkins' communication, in which he said: "I have to advise you that the department considers it impracticable to give the information desired. If, however, the committee, either in the Senate or House, should ask for information as to what steps the department would advise to be taken to facilitate and hasten the construction of public buildings such request would be complied with."

Here, at least, was something definite. Aiken, through Secretary Carlisle, refused to give the amount which Aiken (as architect) said was necessary to complete the postoffice plans so work might be commenced. But still there was no reply from the recalcitrant architect.

At last it was determined to take another course of action, and a messenger was sent to the architect's office to recover the letter of Judge McKenna, which had been ignored as completely as had the personal requests and communications of the California Senators. He was instructed to remain in the architect's office until the letter of the Judge was delivered to him. He waited, but did not get the letter.

Aiken finally wrote Judge McKenna to-day, submitting three alternative plans for the arrangement of courtrooms, and this matter will be intrusted to John P. Irish to deliver. Irish leaves to-night.

The above is taken from the *Call* and comment seems superfluous. The obstructions placed in the way of San Francisco's much-needed and long-promised new Post Office, seems to be intentional on the part either of the Supervising Architect or the Secretary of the Treasury; probably of the latter, as the position of Supervising Architect is a comparatively subordinate one and the boorishness of the incumbent is undoubtedly inspired by his superior officer.

From the official report it is seen that early in the spring of 1894 the plans were begun, and that it took the Supervising Architect's office a full year to get as far as to be able to advertise for bids on the excavating; now another year has passed away, and the office is not even prepared to invite bids on the excavating.

Would any architect in private practice dare to present such excuses, or rather lack of excuses, as justification for delay.

PAPER READ BY JOHN COTTER PELTON BEFORE THE SAN FRANCISCO CHAPTER OF THE AMERICAN INSTITUTE OF ARCHITECTS.

CONTINUED FROM JANUARY NUMBER.

Time is usually of sufficient importance to be considered in any business undertaking; In a building enterprise, the first question of importance after that of cost, is the time which must be given the work of construction, and many plans and methods are taken advantage of to facilitate progress, and hasten the occupation of the building and the opening of the rent roll.

The loss from the area of land in space occupied by the walls I do not believe is always appreciated. I am quite sure it would startle the owners of some buildings, even of recent date. The Mill Building, in this City, loses in its walls twelve per cent of the lot area; the Crocker Building loses eighteen per cent, and the Chronicle loses twenty-one per cent. This seems to me to represent a loss in income,

and any saving in such loss seems to me just so much increase in the income.

The first building to which I applied a marble facing, was built on California street, near Devisadero street, in this City, for Mr. John I. Sabin, some four years ago. This was a wooden building, and was faced to a height of about ten feet, this height representing about the extent of my confidence in the safety of two inch marble. I could figure to do better, but did not feel quite prepared to undertake a greater height.

The next occasion presented itself in the Telephone Building at Los Angeles. The character of the design called for uniformity of material, the height was about thirty feet, and with the limit in mind, of my first experience, (ten feet) was developed the idea of dividing this height of thirty feet into three sections, and supporting the weight of each section independently, *i. e.* transmitting it to the wall. This may be called the first step in this method of ashlar construction, *i. e.* the interruption of the accumulation of the weight. The walls of this building were built, the carriers sat, and the setting of the marble had progressed to the height of the first interruption or carrier, when it was discovered that the variation of these carriers from the proper measurements was so great, and the alignment so irregular as almost to cause an abandonment of the proposed facade, and this was with difficulty overcome. Here came in the attachment of a second and separable bracket or shelf, with means of adjustment to this irregularity of setting and alignment.

The construction of the marble Library Building at Stockton, California, was then undertaken, with a frontage of 270 feet, and carried to a successful issue.

I trust I am not over-confident in saying that this piece of work has demonstrated the feasibility of the constructional principles, and that an examination of its details will substantiate the claims which I have made for the released system of ashlar construction.

Let us now look for objections; if this is *not* a proper form of construction, there must be clear and tenable reasons, readily stated.

From an artistic or æsthetic standpoint, let us first look for these objections. I have looked earnestly, and am unable to find an æsthetic law of thickness. I find nothing to justify the term veneering.

I have never heard an artistic comment upon the thickness or the amount of paint upon an artist's canvass. It is the expression, the character or the sentiment which appeals to us. In fact I cannot find, in the world of art, or in the æsthetic history of architecture, anything about measurements or thickness—to be more practical, I have never heard, except by the ignorant, the term veneering applied, to the architectural facing of four inches of pressed brick in the usual form.

Now, from a constructional standpoint, I am unable to figure out a practical defect, which cannot be provided for. I will state two which have been called to my attention, and which have been certainly worthy of the most careful study and investigation, and to which I am prepared to make answer, but upon these points, I feel that much more can be said, and I trust that if this subject seems to you to be of interest, or that the perfection of such a system of construction may be of value, that some discussion may ensue upon these questions.

The questions are; the possibility of leakage through the joints, and the grinding tendency caused by vibration in a tall structure.

The question of leakage, I think may be answered by proper attention to the workmanship. I have not heard this question raised against the use of a facing of pressed brick, having a multiplicity of joints; why should it be raised against a construction by which this very possibility is reduced five-fold; still, should there be such danger through accident or careless workmanship, it has been suggested by Mr. G. W. Percy, in his report to the Harbor Commission, that means may be provided in the space behind the facing, to care for such seepage.

In the consideration of the question of the tendency of grinding, it must be a very tall structure in which this question would be taken up, but I am prepared to allow to it all the importance which the most careful and technical practitioner may think necessary—feeling that the result will again be found satisfactory. In fact, does not the consideration of this very question revert in favor of the interruption of the facing frequently in the height of such a building and mean another finding in favor of the method? As to the thickness of the facing and the frequency of the interruption, I may say that one balances the other, as the facing increases in thickness, the interruptions should be made at most frequent intervals.

As to the forms of the carriers or anchors, this of course depends upon their position, or upon the duty which they must perform, and varies, of course, constantly according to the architectural character of the facade, etc.

Something might be said of the adaptability to various designs of this method of construction, but still it does not seem necessary; for although familiarity with this form of construction might lead to more simple and readily applied design or style, still it is but a matter of more or less study to make its application satisfactory in any example.

I may state that in the construction of the Stockton Library Building where the Grecian Ionic style was used, no detail was sacrificed in the application of the construction. The style was fully carried out in all its parts and in every detail.

The respective projections are provided for simply by greater strength in the parts.

In the treatment of exposed corners, reference may be again made to the Library Building and to the Telephone Company's Building, in no part of which structures is the thickness of the material evident, and how much more readily this may be effected in the freer Romanesque or Renaissance details, need only be suggested.

In the application of this form of construction to a modern building with steel framing, I feel that there is possible a most perfect achievement, attaining a degree of perfection beyond any form now in use, *i. e.* the strength of the structure being secured in the steel frame—a minimum of material being used for the protection of this frame from fire, and a minimum of material being required for the facing.

ELEMENTARY ELECTRIC DATA.

THE PRACTICAL APPLICATION OF DYNAMO ELECTRIC MACHINERY BY MACFADDEN AND RAY.

“WHAT is electricity? A question often asked and probably never as yet clearly answered.

Those interested in the practical field, find it almost impossible to keep up to the times, in regard to the laws that

govern its generation and control. We know that by means of certain combinations of coils of wire and magnets or by means of chemical action, we can produce, we may say, electricity.

We must be content if we master a few leading laws governing the generation and application of the Electric current. Let the Scientists and Philosophers discuss the question as to what electricity is. In dealing with the simple electric current that is generated by dynamos, batteries, etc., we will find that there are several broad and easily understood laws that govern its practical applications. These laws hold good in all cases and under all conditions, and should be thoroughly understood by anyone desiring to learn even the first and most simple effects of a flow of electric current.

Probably the easiest way to understand this law will be to take a simple case of a pump connected to a loop of water pipe. The pipe is filled with water and it is evident that if the pump is started there will be a circulation of water from the pump through the pipe and back into the pump again. The pump furnishes the power to move the water in the pipe—and it is evident that the water moves through the pipe owing to the pressure exerted by the pump on the water. In (figure 1) an open tank, (d) is shown into which

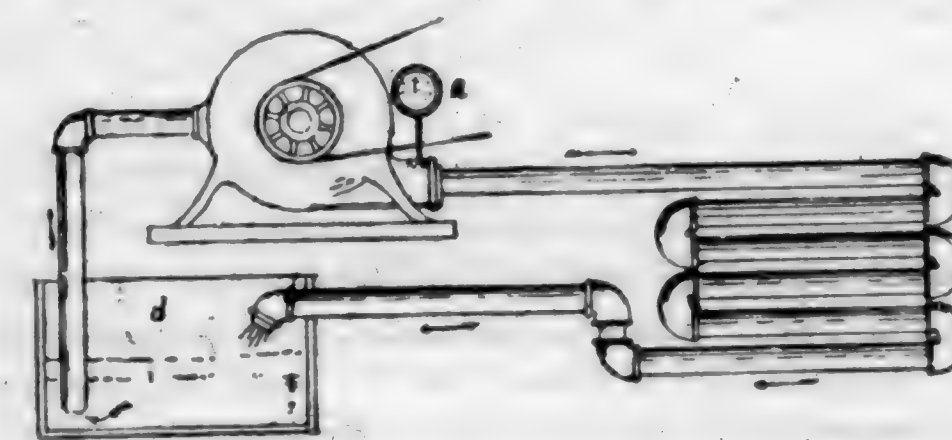


FIGURE 1.—PUMP FORCING WATER THROUGH PIPES.

the water flows from the pipe. The pump takes the water from the tank to keep the pipe filled, and the speed of the water through the pipe and therefore the quantity of water passing through the pump and pipe in a minute of time, will depend on the pressure given the water by the pump.

If we double the pressure of the water and the friction or resistance to the flow of water in the pipe remains constant, the quantity of water handled by the pump will be doubled. In other words by increasing the pressure, we increase the quantity of water passing through the pipe at exactly the same ratio. Now if we found that a gauge placed at (a) would have to register 50 lbs. pressure to make 100 gallons of water pass through the pipe in a minute, it is evident that if the friction in the pipe remained the same, that 100 lbs. pressure ought to put 200 gallons through the pipe. It is also evident that if 100 feet of pipe a certain size offers a definite amount of friction, that twice the length of pipe would have two times the friction or resistance to the flow of water that the 100 feet has. Thus to put 100 gallons of water a minute through a pipe will take $\frac{1}{2}$ the pressure required to force 200 gallons through the pipe. This example may serve the purpose of illustrating the principle of the flow of current from a source of electricity. We will let the dynamo take the place of the pump, which will generate the pressure to send the electricity through the circuit which may consist of lamps, etc., connected by means of conducting wires. The friction in the pipe is represented by the “resistance” of the wire and circuit, and the amount of water used, represent the quantity of the current of electricity.

Instead of using the pound as the unit of water pressure

we will use the term “volt” which is the unit of electrical pressure. We also have a term which denotes the unite of “resistance,” which is the equivalent of “friction” used in the illustration of the pump and pipe. The unit of resistance is called the “ohm.”

Then lastly the quantity of current in electricity is measured by the unit of current quantity, the “ampere.” This is the quantity of current that a pressure of one volt will force through a resistance of one ohm.

The resistance of a conductor of electricity varies not only with its size or cross section but also with the material of which it is made. Silver, when pure, is the best conductor of electricity known, but copper, when pure, nearly approaches silver and is so much cheaper that it is used in nearly all cases to distribute current for practical purposes.

The metals in their order for conductivity are as follows: Silver, Copper, Gold, Aluminum, Zinc, Platinum, Iron, Lead, German Silver, Platinum Silver alloy and Mercury.

In practice the wires or conductors to carry current are either designated in size by their diameter in thousandths of an inch (or mils) or by the sectional area or cross section of the wire expressed in circular mils or by the size in number, as measured by the Standard American or Brown & Sharp Wire Gauge.

A circular mil is a circle $\frac{1}{1000}$ inch in diameter.

As in the case of pump, the higher the pressure in volts at the dynamo, the larger quantity of electricity (expressed in amperes) will be put through a circuit which has a resistance (expressed in ohms) to the flow of current.

Thus if 1 volt pressure will force one ampere of current through a circuit having 1 ohm of resistance, it will take 5 volts to force 5 amperes through this same 1 ohm of resistance, it will take 5 volts to force 5 amperes through this same 1 ohm of resistance and if this resistance is increased to 2 ohms, the pressure would have to be 10 volts to force 5 amperes of current through it.

It will be seen that these terms are dependent on each other and their relation to each other is expressed by what is known as Ohms Law which is expressed:

$$\begin{array}{ccc} \text{Current} & \text{Pressure in Volts} & E \\ \text{in} & \text{Resistance in Ohms} & \text{or } C = \frac{E}{R} \\ \text{Amperes} & & \end{array}$$

“C” standing for current, “E” for electro-motive force or volts, and “R” for resistance expressed in “Ohms.” This relation $C = \frac{E}{R}$ must be remembered for it is the fundamental law of the governing of electric currents, and is used as a foundation to obtain all of the more complex formulas known to the Electrical Engineers.

Take the simple case of a certain make of incandescent lamp, the resistance of the lamp in question is found to be 200 ohms. The pressure of the circuit on which this lamp is designed to run is 100 volts, and according to Ohms law the current in amperes which 100 volts pressure will force through 200 ohms of resistance is $100 \div 200$ or $\frac{1}{2}$ which is the number of amperes such a lamp would allow to pass through it if current at 100 volts pressure was applied.

It will thus be seen that it is a very easy matter to obtain any one of these quantities, provided we have the other two given, by a simple multiplying or dividing of the two known quantities. The relations to each other are expressed

$$\begin{array}{ccc} E & E & E \\ C = \frac{E}{R}, & E = R \times C, & \text{and } R = \frac{E}{C} \end{array}$$

There is still another term with which the practical man is brought in contact and that is the unit of power, the “watt.” This watt is the power represented by the passing

of 1 ampere of current through 1 ohm of resistance and can always be obtained of any current by multiplying the number of volts by the number of amperes.

Thus in the incandescent lamp before spoken of, the watts used by the lamp would be 100 (volts) $\times$ $\frac{1}{2}$ (amp) = 50 (the number of watts), this being the amount of electrical energy necessary to be applied continually to keep the lamp burning. Such an incandescent lamp would be termed "a 50 watt incandescent lamp." An arc lamp which needed a current of 10 amperes, at a pressure of 50 volts to keep it in operation would be termed a "500 watt arc lamp." * *

THE OLD CITY HALL OF SAN FRANCISCO.



HIS old landmark is now razed off the face of the earth and plans are already in for a building to take its place. As a tribute to the Archaeology of California we are enabled by the courtesy of the Hinton Printing Company to publish two views of the building at different stages of its career, and take the following interesting account of its history from the pages of the Municipal Report of San Francisco for 1894-95:

The Board of Supervisors, on January 4, 1895, instructed His Honor the Mayor to sell all the improvements on the City Hall lot on Kearny street, between Merchant and Washington streets.

The buildings had been vacated and accommodation provided for the different offices and departments in the New City Hall, and while some temporary use was made of different portions, the buildings were held to be unsafe for further use.

The purchase by the city and county at different times of the lots and improvements, and the alterations made to adapt the buildings for municipal uses, as well as the repairs and alterations required to be made in consequence of the damage done by the earthquake on October 21, 1868, cost the municipality over one million dollars.

In June, 1852, the Jenny Lind Theater—the central lot and building between the Union Hotel and the El Dorado buildings—was purchased for a City Hall at a cost of \$200,000. In March, 1864, the Union Hotel lot and building, on the corner of Kearny and Merchant streets, was purchased for \$65,000, and the El Dorado lot and building, on the corner of Kearny and Washington streets, for the sum of \$45,000. In March, 1866, a lot and building in rear of the Old City Hall, now occupied by the Morgue, was purchased for the sum of \$15,000.

The site of the Old City Hall is a memorable one, being the central point where the various phases of early California life had full swing, with all the license and abandon that characterized the gambling mania. The following are extracts from the "Annals of San Francisco" and the daily newspapers, in respect to matters appertaining to the site and its use, from time to time, in spite of the destruction visited upon its so-called improvements by conflagrations, to wit:

From the "Annals of San Francisco":

DECEMBER 26, 1849.—This morning about six o'clock, the awful cry of fire was raised in the city, and in a few hours property valued at more than a million of dollars was totally destroyed. The fire began in Dennison's Exchange,

about the middle of the eastern side of the Plaza, and spreading both ways, consumed nearly all that side of the Square, and the whole line of buildings on the south side of Washington street, between Montgomery and Kearny streets.

A certain two-story frame building, known as the "Parker House," and situated on Kearny street facing the Plaza, paid its owners one hundred and twenty thousand a year in rents. Of this sum, somewhere about sixty thousand dollars was paid by gamblers, who occupied nearly the whole of the second floor. The "El Dorado," a gambling saloon which adjoined the "Parker House" on the right, at the corner of Washington street, and which was only a canvas tent of moderate size, brought at the rate of forty thousand dollars per annum.

MAY 4, 1850.—The second great fire in San Francisco, when property to the value of nearly four millions of dollars was supposed to be destroyed. It began about four o'clock in the morning, in the building on the east side of the place called the United States Exchange and before eleven of the forenoon three immense blocks of buildings, with a few trifling exceptions, were totally destroyed. These were the blocks lying between Kearny, Clay, Montgomery and Washington streets, and the two blocks between Dupont, Montgomery, Washington and Jackson streets.

JUNE 22, 1851.—The City Hall, located at the corner of Kearny and Pacific streets, which had been originally erected at an immense expense as a hotel and was purchased more than a year before by the corporation for one hundred and fifty thousand dollars and improved at a heavy cost, was totally consumed, although the principal office records were saved. Mr. Thomas Maguire, the proprietor of the "Jenny Lind Theater" (which was opened in September, 1850), on the Plaza, which was a most valuable building, now lost all again—a sixth time by fire.

OCTOBER 4, 1851.—Opening of the new Jenny Lind Theater, on the Plaza. This was a large and handsome house. The interior was fitted up with exquisite taste; and altogether, in size, beauty and comfort, it rivaled the most noted theaters in the Atlantic States. It could seat comfortably upwards of two thousand persons. The opening night presented a brilliant display of beauty and fashion, and every part of the immense building was crowded to excess. A poetical address was delivered on the occasion by Mrs. E. Woodward. A new era in theatricals was now begun in San Francisco; and since that period the city has never wanted one or two first-class theaters and excellent stock companies, among which "stars" of the first magnitude annually made their appearance. Before this date there had been various dramatic companies in San Francisco, but not before had there been so magnificent a stage for their performance. The "Jenny Lind" did not long remain a theater. The following year it was purchased by the town for a City Hall, for the enormous sum of two hundred thousand dollars. The external stone walls were allowed to stand, but the whole interior was removed and fitted up anew for the special purposes to which it was meant to be applied.

Under the caption of "Hotels, Restaurants and Boarding-houses": The first really substantial and elegant hotel of the city was the "Union." This was a four-story brick building, with a front of twenty-nine feet, on the east side of Kearny street, between Clay and Washington streets, and a depth of one hundred and sixty feet. It was constructed, arranged, finished and conducted as well as any similar establishment at that time in the United States. The cost of



OLD CITY HALL BUILDINGS, 1865.

CALIFORNIA ARCHITECT AND BUILDING NEWS.
SAN FRANCISCO.

VOL. XVII. No. 2. FEBRUARY 1896.



OLD CITY HALL AND VICINITY, 1864.

CALIFORNIA ARCHITECT AND BUILDING NEWS.
SAN FRANCISCO.

VOL. XVII. No. 2. FEBRUARY 1896.



OLD CITY HALL, 1895.

CALIFORNIA ARCHITECT AND BUILDING NEWS.
SAN FRANCISCO.

VOL. XVII. No. 2. FEBRUARY 1896.