Building Intelligence.

With this month the building season of 1882 may be said to have been busily begun. We hope the present activity may continue during all the summer months. This can hardly be expected, however, as the high prices of materials and labor, seriously affect the building of houses for tenement purposes. We know of several jobs after being figured upon, were given up, as the lowest bids offered would not justify the property owners to build, owing to the high prices of lumber, hardware, etc. It will be observed that there are more houses reported that are intended for better class of dwellings than we have been able to chronicle for some time past.

It has always been the aim and object of the managers of this journal to present to its readers as full and as complete a report of buildings being erected as it was possible to obtain both in city and country. To secure information from the interior, it has been our custom to forward to responsible parties each month a blank circular, which, upon being returned to us with the blanks filled out with the necessary information, enabled us to give to our readers news from different parts of the country. We are glad to state that this system will soon be superseded by a much improved plan, the working of which will be seen after this issue in the number of buildings reported from the country.

In our last, one of those *smart* (?) men who no doubt earn their living by not obeying a certain commandment, managed to get hold of one of our blanks, and filled it out in a manner best suited to his illiterate taste. We refer to the item in our last from the town of Woodland. The report given was incorrect in every particular, no such building by such parties as were mentioned being even contemplated. We thank Bro. Saunders, of the Woodland *Democrat*, for his kindness in publishing the card we sent to him, explaining the appearance of the article in this journal. A card in connection with this matter will be found in another part of this issue.

SAN FRANCISCO.

Bush street between Montgomery and Kearney, four-story and basement brick building. Owner, Mrs. Barbara Suter; architect, H. Geilfuss; contractors, Conrad and Miller; cost, $35,000.

Two-story frame dwelling, brick basement, on northeast corner of Buchanan and Jackson. Owner, Mrs. Lemmon; architect, W. Cleaveland; contractor, —— Munns; cost, $12,000.

Southwest corner of Laguna and Sacramento. Two-story frame dwelling with basement. Owner, J. C. Reis; architects, Schmidt & Havens; contractor, C. Chrisholm; cost, $19,000.

North side Golden Gate Avenue between Van Ness and Franklin, double two-story and basement frame dwelling. Owner, H. Frazer; architect, Schmidt; contractor, Langstaff; cost, $7,000.

Three-story frame building on northwest corner Larkin and Grove. Owner, —— Klinecklaus; architects, Kentzer & Raun; contractor, F. Klatt; cost, $8,000.

One-story and basement brick addition to building No. 31 Market street. Owner, M. J. O'Connor; architect, P. Huerne; brick work, O. E. Brady; carpenter work, —— McCready; cost, $4,050.

Two-story frame building on corner of Twenty-fourth and Valencia. Owner, P. Schenckel; architect, —— Apponyi; contractor, Dryer; cost, $9,640.

Three-story brick building with basement on Bryant street near Eighth. Owners, Spivalo & Forman; contractor, J. Grant; cost, $15,000.

Two-story frame dwelling on Beaver street. Owner, Rev. Dr. Beckwith; architect, Chas. Geddes; contractor, R. B. Hicks; cost, $4,000.

Repairs and remodeling building corner Drumm and Oregon streets. Owner, S. C. Hastings; day's work; cost, $4000.

Two-story frame dwelling on south side of O'Farrell between Jones and Taylor. Owner, H. Schmidt; contractor, —— James; cost, $3,000.

Two-story frame building, brick foundation, on southwest corner McAllister and Buchanan. Owner, T. Juncker; architect, —— Bayless; contractor, J. T. O'Brien; cost, $5,000.

North side Fell between Octavia and Laguna streets, two-story and basement frame dwelling. Owner, W. Hewe; architect, W. Winterhalter; contractor, W. Hewe; cost, $3,000.

Two-story frame building on Hayes street near Gough. Owner, Mrs. Kalzee; architect, W. Schroepfer; contractor, H. Meyn; cost, $9,000.

Two three-story frame dwellings on north side Fell between Franklin and Gough streets. Owner, T. Sullivan; architects, Schmidt & Havens; contractor, J. Furness; cost, $11,000.

Two-story and basement frame dwelling on southeast corner of Post and Octavia. Owner, —— Anspacher; architect, C. Geddes; contractor, R. Hicks; cost,

Two-story frame dwelling on south side Geary between Octavia and Laguna streets. Owner, Mrs. Josephs; architects, Schmidt & Havens; contractors, Waterbury & Maxwell; cost, $4,100.

Two-story and basement frame dwelling, brick foundation, on south side Geary between Webster and Fillmore; Owner, D. Cole; contractor, —— Fish; cost, $10,000.

Two-story and attic frame dwelling on east side Scott between California and Sacramento streets. Owner, Mr. Norwood; architect, J. Marquis; contractor, W. M. Fletcher; cost, $6,000.

Three-story frame dwelling on south side of Pine near Scott street. Owner, —— Lewis; contractor, —— Pluns; cost, $4,500.

Two-story frame dwelling on southeast corner of Pacific and Fillmore. Owner, G. E. Ludington; architects, Percy & Hamilton; contractor, —— Jackson; $5,000.

Two-story frame dwelling on Geary street between Octavia and Lguna. Owner, ——; architects, Schmidt & Havens; contractors, Waterbury & Maxwell; cost, $5,000.

Three-story frame dwelling on corner of Gough and Bush. Owner, J. E. Ruggles; architect,—— Smith; contractor, —— Sanchez; cost, $7,000.

Two-story frame dwelling on northeast corner Pacific avenue and Scott street. Owner, Capt. Williams; contractor, —— Treadwell; architect, —— Smith; cost, $4,500.

Additions to building on Beale street between Mission and Howard. Owner, J. R. Sims; contractor, Thos. Day; cost, $2,200.

Alterations to building corner Fourth and Clara streets. Owner, —— Marron; architect, T. J. Welsh; contractors, McCann & Jeffars; cost, $2,000.

Two one-story and basement frame dwellings on Church street between Twenty-eighth and Twenty-ninth. Owner, and builder, R. Bergfeld; cost respectively, $1,200 and $1,700.

One-story frame dwelling on Dore street between Harrison and Bryant. Owner, P. Birch; architect, J. T. Kidd; contractor, T. Sullivan; cost, $800.

Two-story frame tenement on Central Avenue between Bush and Sutter. Owner and builder, D. F. McGraw; cost, $2,400.

One-story frame building on Sutter street, near Broderick. Owner, Maggie McKee; contractor, —— McKee; cost, $2,700.

Two-story frame building on southeast corner of Pine and Fillmore streets. Owner, —— Schoenfeld; architect, W. Winterhalter; contractor, F. Crowley; cost, $6,0 0.

Repairs and alterations to building on south side of California near Fillmore. Owner, F. Wittram; contractor, —— Jackson; cost, $2,500.

Repairs to buil ling on Webster street between Bush and Pine. Owner, Mrs. Phillips; day's work.

Five frame dwellings on northeast corner of Ellis and Laguna streets. Owner, H. Hinkle; day's work.

One-story frame dwelling on Broderick between California and Sacramento streets. Contractor, —— Pluns; cost, $1,000.

Additions to building on Baker between Sutter and Post streets. Owner, W. Ellard.

Two-story frame dwelling on Buchanan street near Golden Gate Avenue. Owner and builder, —— Cram; cost, $1,500.

Repairs to building on Hayes street near Laguna. Owner, Gallagher; day's work.

Repairs on building corner Jackson and Leavenworth street. Owner, ——, Brawling; contractor, J. T. Blake; cost, $900.

Three two-story frame dwellings on east side of Fillmore between Washington and Jackson streets. Owner, J. F. Fortmann; day's work; cost, $7,500.

One-story frame building at Black Point, for the Phelps Manufacturing Company. Day's work.

One story frame dwelling on northeast corner of Filbert and Buchanan streets. Owner, Jas. Sudden; contractor, Frichette; cost, $1,500.

Repairs to two-story frame on north side Ellis between Taylor and Jones streets. Owner, W. O. Davis; contractor, J. Grant; cost, $1,100.

Repairs to dwelling on Leavenworth between Green and Union streets. Owner, L. Waddams; contractor, W. Simon; cost, $1,500.

Alterations and repairs to building corner of Jackson and Larkin streets. Owner, H. Pierce; architect, Ed. Swain; contractor, A. Flood; cost, $4,000.

Alterations to building 1216 Geary street. Owner, J. Kahn; architect, —— Blum; contractor, A. Flood; cost, $5,000.

Repairs to dwelling on Post street between Powell and Mason. Owner, Mr. Frank; architects, Schmidt & Havens; contractor, A. Norton.

Repairs and additions to building junction of Vallejo and Montgomery Avenue. Owner, Mr. Boem; day's work; cost about $2,500.

Two-story frame on Pacific street between Sansome and Battery. Owner, G. Costa; day's work; cost, $1,000.

Repairs to building junction of Market and Oak streets. Owner, D. Nightingale.

One-story frame on Nineteenth near Castro street. Owner, Mrs. Lyons; contractor, —— McInnerny; cost, $700.

One-story frame on Douglass near Seventeenth street. Owner, M. Meibach; contractor, E. Ehrmann; cost, $900.

Four one-story and basement frame dwellings on Fifteenth near Dolores street. Owner, Mrs. Thompson; day's work; cost, $3,000.

Two-story and basement frame dwelling on Valencia near Sixteenth street. Owner, Chas. Welsh; day's work; cost about $3,700.

Repairs and additions in rear 1058 Howard street. Owner, —— Ross; contractors, S. G. Happ & Co.; cost, $1,100.

One-story and basement frame dwelling on Jessie street between Seventeenth and Eighteenth. Owner, Miss E. Donahue; contractor, M. D. Killelea; cost, $1,250.

Repairs to dwelling on Jessie between Eighteenth and Nineteenth streets. Owner, Mr. Kennedy; day's work; cost, about $600.

Repairs to Pacific Oakum Factory on corner of Eighteenth and Harrison. Owner, S. F. Weeks & Co.; day's work; cost about $1,000.

Repairs and alterations to frame building on Howard street near Nineteenth. Owner, F. Gailhouse; contractor, S. M. Hills; cost, $2,000.

Two-story frame dwelling on Twenty-fourth street near San Jose Avenue. Owner, G. Edwards; contractor, —— Cs man; cost, $2,000.

One-story frame building on west side Treat Avenue between Twenty-fourth and Twenty-fifth streets. Owner, Jos. Cantor; contractor, —— Downey; cost, $1,000.

One-story frame on Alabama near Twenty-sixth street. Owner, W. Dunn; contractor, J. Nelson; cost, $800.

Two-story frame on Harrison between Twenty-fifth and Twenty-sixth streets. Owner, W. T. Garratt; contractor, L. H. Nolte; cost, $2,500.

Two-story frame building on Mission and Twenty-ninth streets. Owner, J. Bergstrom; contractor, P. J. Smith; architect, —— Smith; cost, $1,000.

Repairs to frame dwelling on Harrison and Park Avenue. Owner, H. Hugg; contractor, —— Tildon; cost, $800.

Two-story and basement brick building on north side of Post street between Dupont and Stockton. Owner, J. Apel; architect, Hoffmann; cost about $20,000.

Two-story frame dwelling on north side Geary between Fillmore and Steiner streets. Owner, Robt. White; architect, H. T. Bestor; contractor, A. Jackson; cost, $5,000.

Repairs to M. E. Church on Powell near Pacific street. day's work; cost about $3,000.

Alterations to building on Green street near Mason. Owner, P. Marsicano; architect, Hillert; contractor, Classen; cost, $1,500.

Alterations to building on Turk and Polk streets. Owner, C. Mangels; architect, H. Geilfuss; contractors, Conrad & Miller; cost about $1,000.

Two-story and basement frame dwelling on Jones near Ellis street. Owner, A. W. Baldwin; architect, H. Geilfuss; contractor, S. Grant; cost, $4,500.

California between Laguna and Buchanan two-story frame and basement. Owner, Mrs. J. Newgas; architects, Newsom Bros.; contractors, Knight & Littlefield; cost, ——.

Vault in Masonic Cemetery. Owner, Mrs. A. Mau; architects, Moore & Whittemore; contractors, Matthews, McGrath & Cox; cost, ——.

SAN LUIS OBISPO.

The bank is putting in large vaults. Architect, H. D. Mitchell; contractor, Neaglee; cost, $1,500.

ALAMEDA.

One-story cottage on Pearl street. Owner, L. A. McDermith; contractor, Bones; cost, $2,200.

One-story cottage on Railroad Avenue, near Chapin street. Owner, G. Hart; cost, $2,500.

One-story cottage on Alameda Avenue, near Willow. Owner, Mrs. Joyce.

FRESNO.

One-story frame building on Mariposa street. Owner, E. Wimmer; contractor, —— Bohunin; cost, $2,500.

Two-story frame dwelling on I street. Owner, C. A. Munn; contractor, J. Lee; cost, $2,500.

RIVERSIDE.

The Congregational Society are erecting a church in the Redlands near town. Cost about $2,500.

Frame dwelling and barn. Owners, Judson & Brown; contractor, A. W. Boggs.

NAPA.

Additions to the Odd Fellows' Building. Cantractor, J. Cox; cost, about $6,000.

ANAHEIM.

Two-story brick building. Owner, B. Dreyfuss & Co.; cost, $10,000.

From Kentucky to Florida stretches a nearly continuous forest, which has scarcely been touched by the lumbermen.

Publication Notices.

All books noticed in these columns can be had at publishers prices at this office. Sent post-paid to any address.

Practical Lessons in Architectural Drawings	$ 2.50
Carpentry made Easy	5.00
Mechanics' Geometry	5.00
Gould's Carpentry	3.00
Model Homes	1.00
Haney's Alphabets	2.00
Palliser's Details	3.00
" Specifications	.50
Carpenter and Joiner	7.50
Artisan	5.00
Hand Railing	7.00
Carpenter's Companion	.50
Saw Filing	.75
Carpenter's Pocket-book	1.00
Village and Country Houses	5.00
Sewer Gas and its Dangers	1.25
Workshop Companion	.35
Carpenter's Manual	.50
Atwood's Geometry	2.50
Bicknell's Village Builder and Supplement	10.00
" Supplement to Village Builder	4.00
" Detail Cottage & Constructive Architecture	10.00
" Cottage and Villa Architecture	6.00
" Street, Store and Bank Fronts	4.00
" Public Buildings	3.50
" School House and Church Architecture	3.00
" Stables, Outbuildings, Fences, etc	2.50
" Specimen Book, 100 Architectural Designs	1.00
Cameron's Plasterer's Manual	.75
Croft's Progressive American Architecture	6.00
Cumming's Architectural Details	6.00
Gould's Carpenter's and Builder's Assistant, new ed.	3.00
" American Stair Builder's Guide	3.00
Guillaume's Interior Architecture	3.00
Hussey's Home Building	.50
Mitchell's Stepping Stone to Architecture	5.00
Palliser's American Cottage Homes	1.00
" Model Homes	1.50
Powell's Foundations and Foundation Walls	15.00
Wither's Church Architecture	3.00
Woollett's Villages and Cottages, or Homes for all	1.00
" Old Homes made New	9.00
Wooden and Brick Buildings, 4to, 2 vol. each	1.50
Ames' Alphabets	2.00
Standard Sign Writer	.50
Fancy Alphabets	1.00
Practical Draughting	1.00
Proportions	
☞ Sole Agents in California for ☜	
Steel Square and its uses	.75
Steel Square Problems	.50
Modern Architectural Details	10.00

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The First Chapter of the American Institute of Architects West of the Rocky Mountains.

At the last meeting of the Pacific Coast Association of Architects, it was decided to change the name and character of the old organization, by making it a Chapter of the American Institute of Architects. A Constitutlon and By-Laws had been carefully prepared, and were read *ad seriatim*. Printed copies were ordered to be ready in time for the next special meeting, April 12th. This journal will be in print by that time, so we cannot give a report until our June issue, when we will present the Constitution and By-Laws in full.

We bid farewell to the old Association, and extend a cordial greeting to San Francisco Chapter of the American Institute of Architects, by which name, in future, the old organization will be known.

Our New Heading.

After a greater delay than was anticipated at first announcement, we present in this issue the new design for the heading of this journal. As to its merits in design and artistic execution, we await the criticisms of our readers and contemporaries.

To us it possesses a value far beyond its intrinsic qualities, in the fact that it is the generous, voluntary bestowal of the *Pacific Coast Association of Architects*, now known as the SAN FRANCISCO CHAPTER OF THE AMERICAN INSTITUTE OF ARCHITECTS.

For the purpose of inducing our draughtsmen to become more proficient in originality of designs and skillful in execution thereof, the P. C. Association of Architects (at that time called) offered two premiums of $25 and $15 for the best two designs for a heading or frontispiece for this journal. It was generally understood by the Association and all parties interested, that *originality* was to be one of the main features. Seven designs were presented, and were referred to a special committee. The committee in their report decided that the drawings were not such as contemplated, and so called for new designs. Twenty dollars was added to the premiums, and three months time was given to present them.

At the meeting on April I, four designs were presented on the second competitive set. The parties competing were A. T. Matthews, Oliver Everett, Vesta Schallenberger, and W. Schrof. Prizes were awarded to the first three in the order named: 1st prize, $30; 2nd prize, $20; 3rd prize, $10.

We congratulate Mr. Matthews upon his success in producing a design so meritorious in character as to win the first preminm. A still further source of pride to him lies in the fact that this is the first competitive inducement that has been presented to the students and draughtsmen in the profession on this Coast. In competitions of this character, where the judges are so well qualified by practical experience in the determination of awards as were the committee into whose hands this matter was specially intrusted, and the Association as a whole, before which the designs were laid prior to any action on the part of the committee, the result as given by them must always be gratifying to all parties interested; and we hope that in future contests our young draughtsmen will strive in their efforts to outrival those in the East. This they can do, but study and strict application are necessary before they can arrive at the high standard necessary.

We regret that the party presenting the second design did not take more time in working out a truly good conception. It received many very complimentary remarks, and had our young friend bestowed the proper amount of care and time upon the study and execution of his *truly original*, his chances for the first premium would have been materially increased. We say in all kindness to the young men in the profession, that success upon merit is a timid bird, unless the degree of merit is very positive. When the contest is close, a single irregular line, a slur, or an innocent blot may turn the issue.

The third design was presented by quite a young student. It is the intention to present to our readers and the public generally the designs as they were handed in to the Association, so that all may judge of their respective merits. By so doing, it will enable those competing to notice in what manner they could have improved their designs, and thus be of much practical value to them.

After Many Years.

With this issue the CALIFORNIA ARCHITECT AND BUILDING NEWS enters upon a new era of prosperity. Far different is the outlook now from what it was in the dark and dull times when this journal was first started. THEN, predictions as to the number of months which we would publish the NEWS were freely discussed on the corner, and generally among the mechanics.

Now, we can truly point to our journal as an example of what determination and energy will do. At the outset, neither of the editors connected with the publication of this representative organ of the profession enjoyed the least practical knowledge of the necessities and responsibilities that were required to make a success of a journal of this character. We are more than pleased with the success of our efforts.

We can justly point with pride to the

HIGH STANDARD

of our advertising columns. The first firms in the city and State are represented. Eastern inventors and material-men are beginning to find out that the best way to reach the great mass of the consumers of their various commodities is to put an advertisement in this journal. Those that have done so have reaped a rich reward, as is easily proved by their keeping their "ads" in permanently. Some of them having already favored us for more than a year. This they most certainly would not have done unless they had reaped a

GOLDEN HARVEST

for their outlay.

It is the aim and object of the editors to make this an influential journal, and a source of valuable information to architects, contractors, mechanics, and others. Strenuous efforts will be made in each number to have it a little better than its predecessor. This we can easily accomplish, but our friends must help us; this they can do by coming forward and help swell our subscription list. We want and we intend to have at least

TEN THOUSAND

paying subscribers. Measures will keep pace with the means, and the faster and more freely the latter come to hand, the more vigorous will be the former.

Measuring Dressed Lumber.

A planing-mill owner in the South submits the following: "Please state through the columns of your valuable journal the rules or customary ways of measuring flooring and ceiling as it goes to the planer. Namely, if a board is six inches wide and twelve feet long, would it be measured as having six feet of contents when it comes from the machine? Again: if a board be twelve feet long and six inches wide as sawed, but so crooked upon its edges that an inch in the width must be lost in dressing, would it be measured as six feet, or as but five, when dressed? In other words, will you give us the customary rules for measuring dressed and matched ceiling and flooring?"

Lumber passing through a machine is measured as though in the rough. A six-inch strip of course loses in its width by dressing, but it is customary to call it six-inch strip still when computing it for measurement and sale. Before the days of machine dressing, a purchaser bought his lumber in the rough and handed it over to his carpenter to prepare for laying on the floor. He did not ask the manufacturer to sell it to him for what it would absolutely measure when dressed, neither did he expect the carpenter to pay for the decrease caused by dressing. This was a loss which was as much a contingent necessity as was the loss of ends or widths in boards which must need be cut to fill a certain place in the work. It was a loss which was figured for in the estimated cost of the material needed for the building. The introduction of machinery did not shift the responsibility of this

loss; it simply provided for doing more cheaply and efficiently the labor which had hitherto been done by hand. The loss remains the same, and upon the same party. Hence no change in the custom of measuring took place on the introduction of machine dressing.

The second proposition of our correspondent, however, introduces a different element. If a board is crooked it must be measured straight, if entitled to measurement in the grade for which it was intended. Usually crooked lumber loses in grade, but if passed, can be measured only for what it will make. If it is a wedge strip, it is to be measured at its narrow end, for it can only make so wide a piece of flooring as can be manufactured with parallel lines. If it is crooked so that an inch is lost in making it straight, the loss falls on the manufacturer at the sawmill, not upon the planing-mill, and only to the reasonable extent of ordinary loss in dressing upon the purchaser of the planed lumber. Such a strip as our correspondent describes should be measured at five inches in the rough, and would be considered as a piece of five-inch flooring when matched and dressed. This rule holds good in all markets of which we have knowledge.—*Ex.*

Pacific Coast Association of Architects.

The regular monthly meeting of the above Association was held in the rooms of the Art Association, Friday evening, May 5th.

Committee on the first competition designs reported progress, as it is their intention to present a very complete report, so that the students and draughtsmen engaged in the struggle may understand their shortcomings and be prepared to enter future contests with more determination to excel.

The Constitution and By-Laws were presented to the Association for approval. After being read and discussed *ad seriatim*, the Secretary was ordered to have fifty copies printed and distributed to the members, so that they will be fully prepared to discuss them at the nextmeeting.

After a spirited debate, the first section was unanimously adopted. By this act the Pacific Coast Association of Architects is merged into the SAN FRANCISCO CHAPTER OF THE AMERICAN INSTITUTE OF ARCHITECTS, being the first Chapter instituted this side of the Rocky Mountains.

A vote of thanks was tendered the committee who had so ably performed the arduous task of preparing a complete Constitution and By-Laws.

A committee of three was appointed to nominate officers for the ensuing term. Said committee consists of Messrs. Curlett, Wolfe, Sr., and Moore.

A special meeting was ordered called for the purpose of receiving and acting, if need be, upon the report of the above committee, and also to further consider any unfinished business.

NIGHT OF MEETING, MAY 12TH, AT 7.45 P. M.

Secretary was authorized to visit members in arrears, and request them to be present at the next meeting.

Premiums were ordered paid to the successful contestants in the second competition for new heading of the CALIFORNIA ARCHITECT AND BUILDING NEWS.

Besides its uses for adulterating other oils, as a substitute for animal fats in culinary purposes and as a lubricant, the cotton seed oil is now coming into use as an illuminator, said to be superior to lard oil, making a pure white light and emitting no smoke. As far as the test has gone, it is especially useful for mining purposes, as it will not congeal as quickly as the lard oil.

The Redwood of California.

There are many things connected with the location of the redwood that have been a source of deep study amongst our scientists. Why should the trees only be found along the California fog belt? Why is it that in ravines opening towards the ocean, exposed to the fogs, the bottom should be covered with a heavy growth of redwood timber, and as we ascend up the steep mountain-sides the redwood gradually diminishes in size and number, until it is lost to our view on account of its place being taken by the pine and a thick undergrowth of various woods. We have personally noticed this fact, that in the bottom of the ravines we find the redwoods fully developed, but disappear almost entirely on the summits of the various mountain ranges. Fog seems to be as absolutely essential to the redwood as the sun is necessary to flowers.

It must not be supposed by our readers that our immense forests of redwoods do not contain any other kind of timber. Fir, pine, and spruce are liberally sandwiched amongst the redwood. This may or may not be advantageous to the millman. When the loggers and choppers start out to their work, they generally make a clean sweep as they go. Pine or redwood, the path is made clear. But when the logs get to the mills, they have to be assorted. The sharp, full-swedged teeth of the saws that cut their way with so much velocity through the soft redwood will not do for the hard flint knots of the pine, and so when a supply of pine logs are on hand, the teeth of the saws are generally changed.

One immense advantage the redwood has over the timber in forests in the Eastern and Western States, is its size. We have seen trees standing so close together that a man on horseback would find much difficulty in getting between them. Many of them will not have even the smallest branch for at least one hundred feet from the ground. We have frequently seen trees cut into logs, that would make in lumber at the mill over 100,000 feet. Logs at the mills on Humboldt Bay will average over seven feet in diameter. Twelve and fifteen feet diameter is very common for logs, although when they are of that size they are halved or quartered by blasting. One of the largest and finest churches in the city of Santa Rosa is built completely from lumber obtained from one tree; even the shingles were made from bolts obtained from the same source. Speaking about knots, the meanest of them all is a hard, flinty, dry, redwood knot. If our Eastern friends do not think so, let them take a dry redwood board with one of the above-described knots. Let him have a nice sharp saw, and just as he gets near a knot, let him give a little extra hard push so as to get through quick; take our word for it, a surprise will be in store for the man with the saw, for he will actually think a "*blizzard*" has struck a sand dune, and deposited the contents of it in his eyes and down his back. And then let him examine his saw, even if it is SPAULDING'S best. (Our friends of the Pacific Saw Works in this City thoroughly understand this knotty subject, and the temper of their saws is such that even a hard redwood knot is successfully cut by their saws.)

We will feel indebted to any one of our Eastern readers who will forward to us the proportion between rough and clear timber that is obtained from logs in the forests of Maine and Michigan. In redwood the proportion varies. In the more northern counties, as Del Norte and Humboldt, the average of clear lumber in a tree is over 50 per cent.; in Mendocino it is a little less than 50 per cent.; while in Sonoma it is only about 25 per cent.

An erroneous impression prevails amongst some of our subscribers in regard to the reproductive power of the redwood. When a tree has been cut down, shoots will soon make their appearance, which in a few years grow to considerable dimensions. Now, in all earnestness, we think there ought to be a law to protect these young shoots of future grants, and a very stringent one at that. No immediate fear of this generation using all the redwood timber in sight, but the important problem is presented to us of forests completely denuded of their timber in the course of the next sixty or seventy years, and how shall we reforest them?

We earnestly call upon our law makers to devise laws that will stop such acts of vandalism as the following: A man had a nice clearing on one of the bottoms of a river in Humboldt County. It was observed that for a few months of the year the sun was hid from the bottom by a line of tall trees on the ridge of the mountains above. Hiring a few men, as wages was very low at that time, the trees were so thinned out on the ridge that the sun shone resplendently on the "clearing" a few hours more each day, thus enhancing the value of the land at a sacrifice of thousands of feet of lumber.

On the same river, a few miles from the above-mentioned place, a small company took possession of a tract of land, and in order to make a clearing cut down trees without discrimination. Over a hundred trees were thus cut down for the sake of a few acres of sun-lit bottom land. Such acts as the above should be punished, and the sooner a law is framed to meet such cases as the above mentioned, the better it will be for the future generations in California.

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All movements having for their object the elevation and improvement of the mechanical and laboring interests, and the advancement of the working classes, will receive our hearty co-operation and support, so long as moderation, wise council, and prudent action characterizes such movements. This will be the case, if the better and more intelligent men step to the front, and assume control and direction; but if the overzealous and imprudent become the moving and leading spirits, the influence may be disastrous. Men of right mind and honest motives will gather and cluster around the pure and good in every direction, while from the impure and wrongful they will fly with swift tread. We therefore council, that whatever the mechanical and laboring classes may undertake, that prudence, discretion, and good judgment be exercised; for power and success are found in these, while failure is sure to follow all harsh, selfish, and unwise actions.

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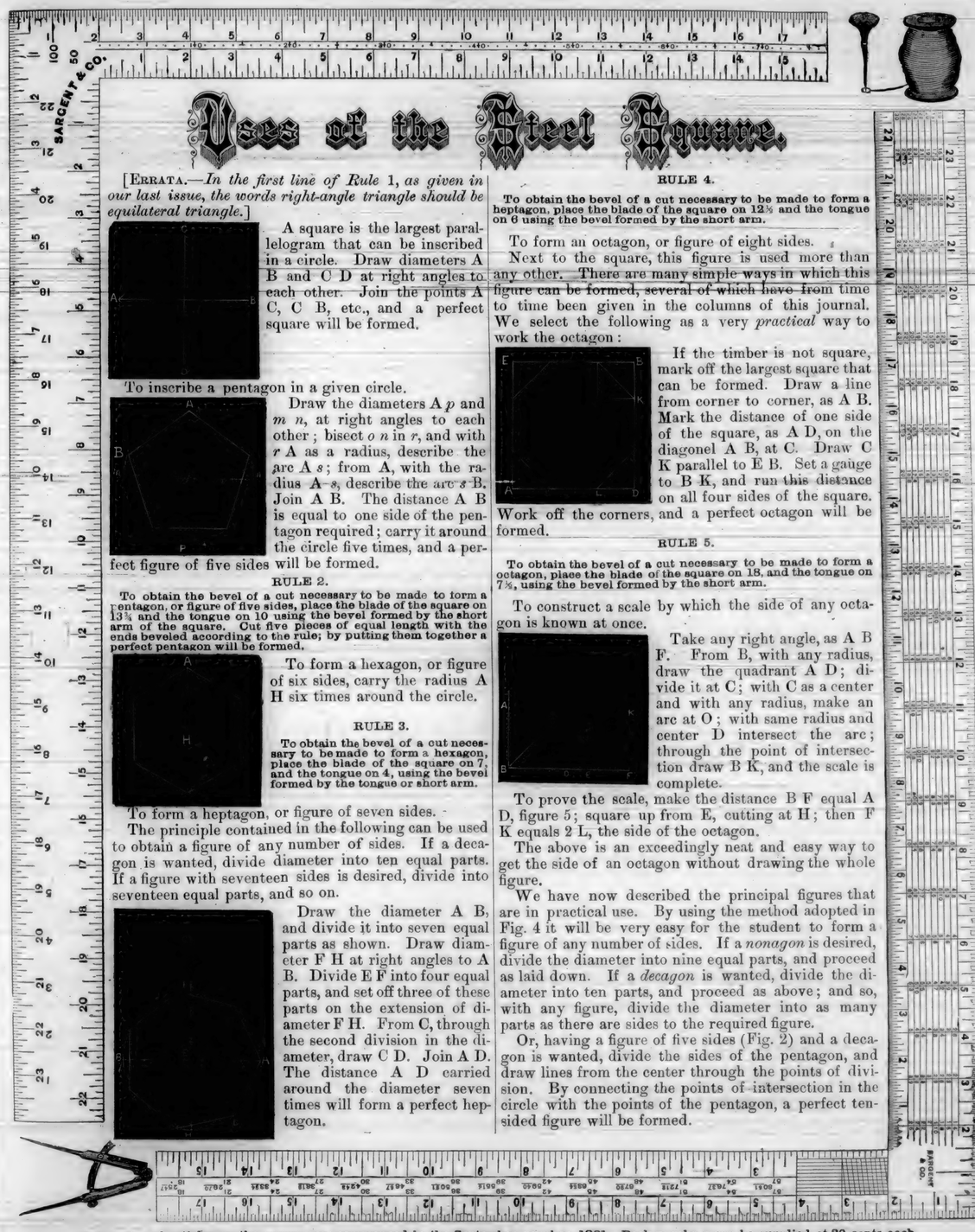

Uses of the Steel Square.

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A square is the largest parallelogram that can be inscribed in a circle. Draw diameters A B and C D at right angles to each other. Join the points A C, C B, etc., and a perfect square will be formed.

To inscribe a pentagon in a given circle.

Draw the diameters A *p* and *m n*, at right angles to each other; bisect *o n* in *r*, and with *r* A as a radius, describe the arc A *s*; from A, with the radius A *s*, describe the arc *s* B. Join A B. The distance A B is equal to one side of the pentagon required; carry it around the circle five times, and a perfect figure of five sides will be formed.

RULE 2.

To obtain the bevel of a cut necessary to be made to form a pentagon, or figure of five sides, place the blade of the square on 13¾ and the tongue on 10 using the bevel formed by the short arm of the square. Cut five pieces of equal length with the ends beveled according to the rule; by putting them together a perfect pentagon will be formed.

To form a hexagon, or figure of six sides, carry the radius A H six times around the circle.

RULE 3.

To obtain the bevel of a cut necessary to be made to form a hexagon, place the blade of the square on 7, and the tongue on 4, using the bevel formed by the tongue or short arm.

To form a heptagon, or figure of seven sides.

The principle contained in the following can be used to obtain a figure of any number of sides. If a decagon is wanted, divide diameter into ten equal parts. If a figure with seventeen sides is desired, divide into seventeen equal parts, and so on.

Draw the diameter A B, and divide it into seven equal parts as shown. Draw diameter F H at right angles to A B. Divide E F into four equal parts, and set off three of these parts on the extension of diameter F H. From C, through the second division in the diameter, draw C D. Join A D. The distance A D carried around the diameter seven times will form a perfect heptagon.

RULE 4.

To obtain the bevel of a cut necessary to be made to form a heptagon, place the blade of the square on 12⅝ and the tongue on 6 using the bevel formed by the short arm.

To form an octagon, or figure of eight sides.

Next to the square, this figure is used more than any other. There are many simple ways in which this figure can be formed, several of which have from time to time been given in the columns of this journal. We select the following as a very *practical* way to work the octagon:

If the timber is not square, mark off the largest square that can be formed. Draw a line from corner to corner, as A B. Mark the distance of one side of the square, as A D, on the diagonel A B, at C. Draw C K parallel to E B. Set a gauge to B K, and run this distance on all four sides of the square. Work off the corners, and a perfect octagon will be formed.

RULE 5.

To obtain the bevel of a cut necessary to be made to form a octagon, place the blade of the square on 18, and the tongue on 7⅛, using the bevel formed by the short arm.

To construct a scale by which the side of any octagon is known at once.

Take any right angle, as A B F. From B, with any radius, draw the quadrant A D; divide it at C; with C as a center and with any radius, make an arc at O; with same radius and center D intersect the arc; through the point of intersection draw B K, and the scale is complete.

To prove the scale, make the distance B F equal A D, figure 5; square up from E, cutting at H; then F K equals 2 L, the side of the octagon.

The above is an exceedingly neat and easy way to get the side of an octagon without drawing the whole figure.

We have now described the principal figures that are in practical use. By using the method adopted in Fig. 4 it will be very easy for the student to form a figure of any number of sides. If a *nonagon* is desired, divide the diameter into nine equal parts, and proceed as laid down. If a *decagon* is wanted, divide the diameter into ten parts, and proceed as above; and so, with any figure, divide the diameter into as many parts as there are sides to the required figure.

Or, having a figure of five sides (Fig. 2) and a decagon is wanted, divide the sides of the pentagon, and draw lines from the center through the points of division. By connecting the points of intersection in the circle with the points of the pentagon, a perfect ten-sided figure will be formed.

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loss; it simply provided for doing more cheaply and efficiently the labor which had hitherto been done by hand. The loss remains the same, and upon the same party. Hence no change in the custom of measuring took place on the introduction of machine dressing.

The second proposition of our correspondent, however, introduces a different element. If a board is crooked it must be measured straight, if entitled to measurement in the grade for which it was intended. Usually crooked lumber loses in grade, but if passed, can be measured only for what it will make. If it is a wedge strip, it is to be measured at its narrow end, for it can only make so wide a piece of flooring as can be manufactured with parallel lines. If it is crooked so that an inch is lost in making it straight, the loss falls on the manufacturer at the sawmill, not upon the planing-mill, and only to the reasonable extent of ordinary loss in dressing upon the purchaser of the planed lumber. Such a strip as our correspondent describes should be measured at five inches in the rough, and would be considered as a piece of five-inch flooring when matched and dressed. This rule holds good in all markets of which we have knowledge.—*Ex.*

Pacific Coast Association of Architects.

The regular monthly meeting of the above Association was held in the rooms of the Art Association, Friday evening, May 5th.

Committee on the first competition designs reported progress, as it is their intention to present a very complete report, so that the students and draughtsmen engaged in the struggle may understand their shortcomings and be prepared to enter future contests with more determination to excel.

The Constitution and By-Laws were presented to the Association for approval. After being read and discussed *ad seriatim*, the Secretary was ordered to have fifty copies printed and distributed to the members, so that they will be fully prepared to discuss them at the nextmeeting.

After a spirited debate, the first section was unanimously adopted. By this act the Pacific Coast Association of Architects is merged into the SAN FRANCISCO CHAPTER OF THE AMERICAN INSTITUTE OF ARCHITECTS, being the first Chapter instituted this side of the Rocky Mountains.

A vote of thanks was tendered the committee who had so ably performed the arduous task of preparing a complete Constitution and By-Laws.

A committee of three was appointed to nominate officers for the ensuing term. Said committee consists of Messrs. Curlett, Wolfe, Sr., and Moore.

A special meeting was ordered called for the purpose of receiving and acting, if need be, upon the report of the above committee, and also to further consider any unfinished business.

NIGHT OF MEETING, MAY 12TH, AT 7.45 P. M.

Secretary was authorized to visit members in arrears, and request them to be present at the next meeting.

Premiums were ordered paid to the successful contestants in the second competition for new heading of the CALIFORNIA ARCHITECT AND BUILDING NEWS.

Besides its uses for adulterating other oils, as a substitute for animal fats in culinary purposes and as a lubricant, the cotton seed oil is now coming into use as an illuminator, said to be superior to lard oil, making a pure white light and emitting no smoke. As far as the test has gone, it is especially useful for mining purposes, as it will not congeal as quickly as the lard oil.

The Redwood of California.

There are many things connected with the location of the redwood that have been a source of deep study amongst our scientists. Why should the trees only be found along the California fog belt? Why is it that in ravines opening towards the ocean, exposed to the fogs, the bottom should be covered with a heavy growth of redwood timber, and as we ascend up the steep mountain sides the redwood gradually diminishes in size and number, until it is lost to our view on account of its place being taken by the pine and a thick undergrowth of various woods. We have personally noticed this fact, that in the bottom of the ravines we find the redwoods fully developed, but disappear almost entirely on the summits of the various mountain ranges. Fog seems to be as absolutely essential to the redwood as the sun is necessary to flowers.

It must not be supposed by our readers that our immense forests of redwoods do not contain any other kind of timber. Fir, pine, and spruce are liberally sandwiched amongst the redwood. This may or may not be advantageous to the millman. When the loggers and choppers start out to their work, they generally make a clean sweep as they go. Pine or redwood, the path is made clear. But when the logs get to the mills, they have to be assorted. The sharp, full-swedged teeth of the saws that cut their way with so much velocity through the soft redwood will not do for the hard flint knots of the pine, and so when a supply of pine logs are on hand, the teeth of the saws are generally changed.

One immense advantage the redwood has over the timber in forests in the Eastern and Western States, is its size. We have seen trees standing so close together that a man on horseback would find much difficulty in getting between them. Many of them will not have even the smallest branch for at least one hundred feet from the ground. We have frequently seen trees cut into logs, that would make in lumber at the mill over 100,000 feet. Logs at the mills on Humboldt Bay will average over seven feet in diameter. Twelve and fifteen feet diameter is very common for logs, although when they are of that size they are halved or quartered by blasting. One of the largest and finest churches in the city of Santa Rosa is built completely from lumber obtained from one tree; even the shingles were made from bolts obtained from the same source. Speaking about knots, the meanest of them all is a hard, flinty, dry, redwood knot. If our Eastern friends do not think so, let them take a dry redwood board with one of the above-described knots. Let him have a nice sharp saw, and just as he gets near a knot, let him give a little extra hard push so as to get through quick; take our word for it, a surprise will be in store for the man with the saw, for he will actually think a "*blizzard*" has struck a sand dune, and deposited the contents of it in his eyes and down his back. And then let him examine his saw, even if it is SPAULDING'S best. (Our friends of the Pacific Saw Works in this City thoroughly understand this knotty subject, and the temper of their saws is such that even a hard redwood knot is successfully cut by their saws.)

We will feel indebted to any one of our Eastern readers who will forward to us the proportion between rough and clear timber that is obtained from logs in the forests of Maine and Michigan. In redwood the proportion varies. In the more northern counties, as Del Norte and Humboldt, the average of clear lumber in a tree is over 50 per cent.; in Mendocino it is a little less than 50 per cent.; while in Sonoma it is only about 25 per cent.

An erroneous impression prevails amongst some of our subscribers in regard to the reproductive power of the redwood. When a tree has been cut down, shoots will soon make their appearance, which in a few years grow to considerable dimensions. Now, in all earnestness, we think there ought to be a law to protect these young shoots of future grants, and a very stringent one at that. No immediate fear of this generation using all the redwood timber in sight, but the important problem is presented to us of forests completely denuded of their timber in the course of the next sixty or seventy years, and how shall we reforest them?

We earnestly call upon our law makers to devise laws that will stop such acts of vandalism as the following: A man had a nice clearing on one of the bottoms of a river in Humboldt County. It was observed that for a few months of the year the sun was hid from the bottom by a line of tall trees on the ridge of the mountains above. Hiring a few men, as wages was very low at that time, the trees were so thinned out on the ridge that the sun shone resplendently on the "clearing" a few hours more each day, thus enhancing the value of the land at a sacrifice of thousands of feet of lumber.

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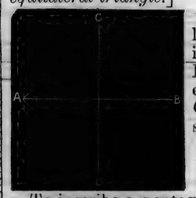

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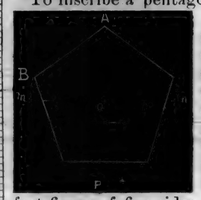

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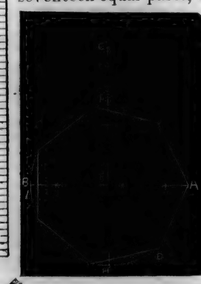

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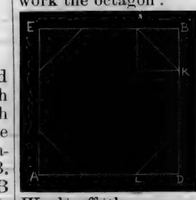

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Take any right angle, as A B F. From B, with any radius, draw the quadrant A D; divide it at C; with C as a center and with any radius, make an arc at O; with same radius and center D intersect the arc; through the point of intersection draw B K, and the scale is complete.

To prove the scale, make the distance B F equal A D, figure 5; square up from E, cutting at H; then F K equals 2 L, the side of the octagon.

The above is an exceedingly neat and easy way to get the side of an octagon without drawing the whole figure.

We have now described the principal figures that are in practical use. By using the method adopted in Fig. 4 it will be very easy for the student to form a figure of any number of sides. If a *nonagon* is desired, divide the diameter into nine equal parts, and proceed as laid down. If a *decagon* is wanted, divide the diameter into ten parts, and proceed as above; and so, with any figure, divide the diameter into as many parts as there are sides to the required figure.

Or, having a figure of five sides (Fig. 2) and a decagon is wanted, divide the sides of the pentagon, and draw lines from the center through the points of division. By connecting the points of intersection in the circle with the points of the pentagon, a perfect ten-sided figure will be formed.

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The Architecture of the Renaissance.

This new style of architecture, which is known by the distinctive name of the RENAISSANCE, that is to say, the new birth of Roman architecture, first sprang into existence in Italy as early as the beginning of the fifteenth century. It reached its zenith in that country in the course of the same century, and at the beginning of the following became a model for all other countries, in which, however, the Gothic style prevailed for some time longer, and maintained its ground against the encroachment of its rival. In Italy, on the other hand, the pointed style was abandoned, except in isolated instances, and notably in Lombardy. The style which was thus introduced into the countries north of the Alps was consequently accepted there as one which was already developed, and the buildings constructed in it were mere imitations of the Italian; moreover, after it was introduced, it underwent no further change or development, and on that account was designated, especially in Germany, as the Italian style.

At the early epoch of its existence the new style of architecture displays not so much an alteration in the arrangements of the spaces and of the main features of the buildings, as in the system of ornamentation and in the aspect of the profiles. The object and construction of the buildings of the period in question were very different from the collosal monuments of ancient Rome, which were now to serve as an example; and consequently the model was mainly copied in the decorative details, principally in the columnar orders with their various entablature. It is owing to this cause that the façades appear to a certain degree to be merely appendages to the main building. Architects, moreover, could not at once abandon the customary freedom of conception which had been permissible in the Romanesque style, nor subject their imagination to the strict rules of Roman architecture, by surrendering all endeavors to attain picturesque effects. Roman architecture was consequently not at first a model which secured that slavish obedience which became its prerogative in later times. At the outset, moreover, the essential character of Roman architecture was not fully understood, as far as material and construction are concerned: It was consequently only in the case of buildings which did not require a total abandonment of the prevalent style that Roman architecture was at first employed.

In accordance with the tendency of the age, ecclesiastical architecture, which had assumed such prominence during the prevalence of the Byzantine, Romanesque, and Gothic styles, was now thrown into the background; whilst the style of the Renaissance was brought to the front, in the construction of castles and palaces. The varieties that occur in the style of the Renaissance are therefore not to be considered, as in the case of the previous styles, as the result of time and national peculiarity, but rather as the effects of individual and assumptive personal conceptions.

The first period of this modern style of architecture is also its brightest one. The façade of the Certosa, at Pavra, may be cited as the most notable instance. This was begun by Ambrogio Borgognone in 1473, and is very rich in sculpture; but the rest of the building, with the exception of the dome, which is also Renaissance, belongs still to the Gothic period.

The invention of printing exercised a considerable influence on the development of this style of architecture. The works of Vitruvius were translated into Italian and printed in 1521, and were soon extensively circulated. Owing to the tendency and predilection for classical antiquity which were then beginning to be displayed, as well as to the scanty knowledge of Roman architecture which the world then possessed, it is not to be wondered at that these works soon came to be viewed as an authority. But although the writings of Vitruvius, and laws of architecture based on the classical monuments themselves, were considered as authoritative, still the traditional forms were employed in a new spirit and in a new manner. A striving for the picturesque is perceptible amidst the massiveness of the new style. At first this tendency was confined within discreet bounds, but after the first twenty years of the sixteenth century it was extended to an undue degree.

During the flourishing period of the Renaissance, architecture showed less hankering after mere richness of detail, and strove rather after noble simplicity; and this tendency was exhibited even in interiors, although in a modified degree. This flourishing period lasted scarcely fifty years, and occurred at the middle of the sixteenth century, and during its prevalence decoration was kept in due bounds, and in harmony with the principal forms. At the same time it cannot be denied that a certain architectural beauty, or at least a pleasant effect, was often produced in the later period of the Renaissance when the decoration was no longer so well regulated, and when the details were not in such strict accordance with the main object of the design.

The artistic influence of Italy came into operation in France sooner than in other European countries, for as early as the fifteenth century the Renaissance style was introduced there by Italian architects; as, for instance, by Fra Gioconde, who was summoned thither by Louis XII. But at that epoch, the Flamboyant style was still in its vigor, and the buildings then erected could not extricate themselves from its influence. The consequence was that a blending of the two styles temporarily prevailed.

In the second half of the seventeenth century, the better tendencies of the Renaissance period disappear, and the new edifices display proofs of a deterioration of taste; the degeneration which had set in continued to increase with time, as may be gathered from the various buildings of the reign of Louis XIV. In accordance with the disposition of that monarch, architecture was for the future only to give expression to that proud pomp which characterized all the undertakings and the whole reign of the grand monarque.

The principal architectural activity of this period was displayed by Jules Hardouin Mansard, who was head architect to the king, and the head of an influential school. He freely introduced mirrors in the embellishment of rooms, especially in connection with the fireplaces, and may be said to have now become a distinctive feature in the decoration of interiors. On Mansard's death, a new system of decoration arose for interiors, which is often known under the designation Roccoco. This style will be described in a future issue.

The Renaissance style was introduced in Germany about the middle of the sixteenth century. Spain and England adopted the style about the same time.

It must be remarked that the sculptured ornament of the early Renaissance was distinguished by its excellent effect, due partly to the fact that the separate portions of the decoration were varied both in their bulk and in the degree of projection given to them, but more to vigorous undercutting and skillful disposition of light and shade, so that when seen from a distance only a few points stand out in prominent relief. It is only on a close inspection that the more delicate lines of the leaves, tendrils, and figures which connect together these large masses display themselves. The masterly manner with which Renaissance ornament is treated appears chiefly in the fact that all portions are not dealt with alike, the finest effects being obtained by the subordination of individual portions and the prominence given to those which are most important. The ornaments are also so arranged as to form a pleasing contrast with the containing or adjoining architectural lines, and are fitted and subordinated to them—a matter of the highest importance. In this respect the later Renaissance cannot boast of equal success. On the contrary, more salient ornaments began to be uniformly employed, and in too great profusion. Increased richness of effect was, it is true, thus arrived at, but the productions lost in grace what they gained in richness. As a sort of counterpoise to this tendency, the architectural moldings and details were executed in a more decisive and prominent way, so as to keep the decorative details in subordination to the main plan. On the other hand, ornamentation tried by dint of increased extravagance to accommodate itself to the exaggerated architectural features. The result of this was that the style became heavy and inartistic.

The *Sanitary Engineer* contains a letter from a practical plumber, which is full of interest for those careless or uninstructed plumbers, architects, or amateurs who still continue to countenance the dangerous practice of using chimney-flues as conduits for the foul vapors of vaults or drains. According to this correspondent, a soil-pipe in a large Western hotel was carried into a flue of a chimney which was constantly warm. There could hardly be much question that an ascending current of greater or less force would be constantly maintained in such a flue, so long as the supply of air was kept up from the soil-pipe; but in spite of this the foul gases diffused themselves so rapidly through the brickwork into the rooms adjoining the chimney as to cause a deep stain in the plastering, and to render it "as soft as putty." In addition to this, as the letter says, "the stench created was terrible." What could have caused the softening of the plaster we do not quite understand, unless, perhaps, some oxidation of the ammonia from the pipe into nitric acid may have taken place in the pores of the mortar; but we can fully comprehend the discoloration and the stench, which were only the natural result of the arrangement. The writer adds that "the soil-pipe has since been run through the chimney and about six inches above it. There has been no trouble since." We hope besides this all the plaster over the flue, if not the whole of the inclosing brickwork, has been removed and replaced with fresh material. If this has not been done, we can assure all whom the information may concern that the rooms through which the flue passes will for a long time be dangerous to their occupants. The organic filth with which the bricks and mortar are saturated will, notwithstanding the cutting off of further supplies, and the cessation of "trouble," continue for many months, or even years, in a state of what may be called malignant decomposition, pouring volumes of virulent though subtle poison into the air. Disinfection, as ordinarily practiced, can do little toward purifying walls so corrupted; nothing short of complete extirpation of the materials exposed and the substitution of new can give any real security.—*The American Architect and Building News.*

Removal of Metallic Particles from the Cornea.

The "Glasgow Medical Journal" (February, p. 150) quotes from the "Revista de Sciencas Medicas" the following hint as to the treatment of foreign metallic bodies in the cornea. A blacksmith, while forging a piece of iron received in his left eye a splinter of the metal. Every effort made according to the ordinary methods for its removal having failed, Dr. Rodriguez employed a wash consisting of rose water, 90 grammes; iodine, 0·05 gramme; potasium iodide, 0·05 gramme. The result was satisfactory, the particle of metal being converted into iodide of iron and dissolving out, and the cornea regaining its normal condition.

Tinting Suburban Residences.

The subject of painting suburban villas is attracting more attention now than formerly. The styles heretofore prevalent have become too negative in their effects to suit the cosmopolitan æsthete. And it is for this reason we must cater to tastes that have had an education in other countries. With us the burden of coloring has become too heavy, assuming the austere to coldness. Such colors, like the natural stones when massed in large structures, look well invariably, but soon they become monotonous from their stern, unyielding nature. Few venture out of sight of some known color, and others copy leaden hues draped in sable fringes, because, forsooth, some other house has been thus hideously shrouded in the habiliments of mourning.

When buildings, new or old, are to have new coatings of paint, they should be patterned after the opening of spring-time, with the gayly hued flowers. The blooming tinted fields, ablaze with parterres of bright yellow and purple, with variegated patches, lighting up the green sward with their gay attire. Such gay adorning colors make our home spots more endearing, and we look forward, when returning to them, as the sunshine where we can enjoy the home sweet home of the family circle amid its joyous surroundings. A house in color is far more attractive than those whose vestments are carbonated with lead, and they will out-wear those without color, as the former is a protector.

For a country residence Plate B, in the January number of the CALIFORNIA ARCHITECT AND BUILDING NEWS, is a fine one for the exhibition of color. Supposing its site to be well adorned with trees and ornamental foliage, the house would look well in a suit of colors on body and its outlines. The first to have a light shade of yellow or peach bloom, with the second a light dove-tinted blue, the sash and doors of mahogany color. The base, steps, and landings a light red sandstone. The roofing and other coverings a deep blue-green, with chimneys of house colors. The effect of such a scheme of coloring is fine when blended with exteriors of sky and earth; it will be found in harmony with all nature. Should the taste require more subdued shades, a body color of pearly hue might be substituted in lieu of the warm tint named above. The February number contains Plate No. 2; here we have an elevation of a plain dwelling, with an ordinary village surroundings. This style of house will look well in one shade of light cream-color, or it may be trimmed with pure white, roofings dark Indian red or Prince metallic, doors oak, and the sash bronze-green. The steps and floorings to base line be done in granite or a marble of the same tone. Plate No. 4 in the same number represents a one-story house of elaborate finish. This building would look well in two colors, the body of a light canary-color with a tint of canary-olive for the outlines, picked in with the light in the paneling and columns, doors and vestibule walnut or rosewood, and sash to match. The steps variegated marble, and the blocked base. The same or crome-orange and blue in alternate blocks, with walks of granite along the front and sides. The coping of roof blue slate-color and chimneys in base colors. It may be said that such a code of colors are too exotic in tone, and tropical in their nature. That is very true, they have a very strong inclination to strong hues, but such a scheme properly managed must have a unique effect if supported by proper relatives. In the March number there is in plate No. 1 a neat suburban residence. A building in this style dressed in a suit of any lively colors will have a fine effect. In a suit of light drab, with light or dark shade for trimmings, roofing in deep blue slating color, with bronze sash and walnut doors, brick underpinning red, lined with white or black. I have tinted this sketch in canary-yellow, with a subdued crome for the outlines with light prussian blue slating, and its effect is bright and cheerful with the green foliage flanking its sides, while the grass plats in front mass in full dress parade.

In Plate 2 there is an elevation of a church which we would suggest a coloring in which it would look attractive. The rustic to have a light olive, trimmed with a warmer tint in which yellow prevails, roofing Indian red, doors in rosewood. The pediment over entrance a dove-colored blue, serving as a background for tablet. Sashes in deep vermilion where the glass is not stained, but if colored, the sash bars should be deeped with a tuscan red, and made in tone with ultramarine blue. The steps and risers to be laid in with light sandstone and a similar shade for base, if of wood. Let not the color blindness of the past prevail, but rather cultivate imitation of nature and put off the sackcloth and ashes of the past, and let the rainbow of promise shine in all its beauty.

J. E. W. C.

Scarcity of Draughtsmen.

For the first time in many years, Architects find it very difficult to secure the services of competent draughtsmen. During the prevalence of the dull times, during the past two years, the more energetic and competent ones betook themselves to places that were not affected with Kearneyism, or ground down by the encroachments of a foreign population. Some engaged in other occupations, and do not see the wisdom of making any change for the *present boom*, not knowing that it is destined to last for any length of time.

From Santa Barbara on the south to Portland, Oregon, on the north, we hear of inquiries for draughtsmen. Architects in Sacramento, Oakland, etc., have been obliged to let work stand, while trying to secure competent workmen. Two things have worked around to cause this state of facts. The farmers have had "two years of plenty," and a third is almost assured. Consequently all our country Architects are fairly busy, needing the services of help that a year ago was dispensed with, even if it did cause the *head* of the office a few hours more of work in evenings and Sundays. *Now*, the Architect finds it more profitable to spend *his* time interviewing his friends in regard to future improvements, while his assistant in the office prepares the plans from sketches which his superior has given to him.

Another cause may be found in the stagnation of the mining market. Capital will not lie idle, when there is any show whatever for its investment. Now as mining stocks fail to return any investments worth considering, capitalists look around for other and safer methods of putting their money where a sure return will await them. No surer and safer method exists than in the purchase of real estate, and the erection of houses either for rent or speculation.

One but needs examine our report in last month and this number's "BUILDING INTELLIGENCE," to see at once that an unusually large number of buildings are in process of erection. With such a showing in this city, and with work starting up all over the State, it does not seem surprising that draughtsmen's services are at a premium.

We do not intend that our Eastern friends, who read this article, should understand there is an opening here for a number of draughtsmen immediately, and California-like, pack up their things and start for this place, trusting to luck to get into a good office for an indefinite time. At present 15 or 20 good draughtsmen could possibly secure profitable engagements, but for how long a time would depend greatly upon their qualifications.

Should any of our Eastern friends desire to make the "Golden State" their home, we will take pleasure in informing them of their chances to secure employment. When writing, state age, qualifications, etc., so that we may not make false statements to those desiring draughtsmen. Be sure and state the number of years you have been engaged as draughtsman, and the degree of skill at which you have arrived. All such will have to register themselves, the same as if they were already here.

Our "REGISTER FOR DRAUGHTSMEN" is open to all, and the same conditions apply to all, whether in this State or not. A fee of $2.50 is charged. When paid, it entitles the payee to information as long as he remains in the State, even if it be 20 years. No other expense is attached in any manner. As we stated in our last, this fee has become a necessary charge for us to make, owing to the fact that many letters are sent to us every month, and so far we have borne the expense of stamps, etc., without a murmur. But owing to the fact that this Journal is an assured success, and that soon an extra clerk will be needed, part of whose duties will be the supervision of the Book of Registration, we think it no more than just that the parties benefitted should share part of the expense. Hence the Registration Fee of $2.50.

Ventilation and Fresh Air.

Fireside comforts are almost inseparable from the idea of an open fireplace; and from a hygienic standpoint, too, the old-fashioned chimney, or an open grate, is far superior to a closed stove. But it should not be forgotten, writes Dr. Oswald, in the *Popular Science Monthly*, that the operation of the chimney-draft alone is insufficient to correct the vitiated air of a small room; it merely creates an outward current. An open window completes the renovating process; in cold weather a few minutes are sufficient to revitalize the in-door atmosphere for a couple of hours. Only the blindest prejudice can deny the pleasant effect of such an influx of life-air; it revives the azotized lungs as a draft of cool water refreshes the parched palate. Colds are never caught in that way. The very name is a misleading misnomer; inflection or influenza would be the right word. Long exposure to a freezing storm, in certain cases, induces a pure pleuritic fever—a very rare affection, and entirely different from the only too familiar catarrh.

What we call a cold is caused by the influence of impure air, or dust, on the sensitive tissue of our respiratory organs; subsequent exposure to the open air merely intimates the crisis of the disorder—the discharge of the accumulated mucus through the nose or throat. Fresh air is here only the proximate cause, as in tooth-ache, or in those paroxysms of retching following upon the first respiration of a half-drowned person. If we postpone the crisis by persistently avoiding the open air, the unrespirable matter, instead of being discharged, will be deposited in the tissue of the lungs in the form of tubercles.

One of the questions most frequently asked in respect of professional practice is answered in *La Semaine* according to the French custom. Some individual, apparantly a manufacturer, writes to inquire whether he has not a right to the original drawings and specifications of a building which he has just had constructed for him, and if the architect refuses to give them up, whether he is not entitled to keep back a part of his commission. To this *La Semaine* replies that "the architect is bound to deliver up to his client a copy of the plans and specifications; but that these documents are usually furnished at the beginning of the work, for the assistance of the client in discussing and fixing the details of arrangement and construction, and if these are mislaid or thrown aside, he is not required to furnish a second set."—*The American Architect and Building News.*

EVERYBODY'S COLUMN.

"FAS EST AB HOSTE DOCERI."

[While this column is open to all, farmers as well as mechanics, engineers as well as architects, we would call particular attention to one and all to have their questions and the information desired to be in accord, as far as possible, with the interests of this journal and for the carrying out of those principles for which the only monthly of its kind this side of the continent, was established. We will endeavor to answer all questions in a fair and impartial manner, and if it becomes necessary, will furnish cuts for the illustrations of any problem, provided we regard the solution thereof as beneficial to the majority of our readers. We would urge upon our patrons the necessity of being pointed in their questions, concise in the language used; let the writing be distinct, and one side of the paper only to be used; give full name and address, and particularly mention if their proper name shall be used.

We want it distinctly understood that the responsibility of signed articles rests with the authors.

Correspondents will please direct all communications to the business manager of this journal—240 Montgomery street, rooms 12 and 13.]

FRIEND ARCHITECT: I often find difficulty in getting my paper to stick to my draughting boards. I use mucilage made by myself from the best Gum Arabic, but after the paper is seemingly stuck, it will curl off. What is the remedy to apply?

DRAUGHTSMAN.

One of the difficulties with Gum Arabic lies in the fact that when it is thoroughly dry, it becomes brittle and the object falls off. A good and simple remedy for this difficulty lies in the addition of from five to ten drops of glycerine to each fluid ounce of mucilage. Also, be sure there is no dust on your board before you attempt to stick your paper on.

BUSINESS MANAGER OF ARCHITECT: In your "History of the Steel Square," you gave a very good description of the early history of that instrument. In your researches in regard to the square, you might have noticed the invention of the saw; if so, please interest many of your readers by relating who invented the saw, at what time, etc.

R. & H.

Our researches into the history of the square necessarily led us to notice all the different tools. When or where the first saw was made is simply a matter of conjecture. From the description of the Ark and the Temple of Solomon, we naturally conclude that the saw must have been known at that time. It is represented on the obelisks of Egypt. How they were kept in order, however, is a puzzle, as we do not read of any drawings of files or anything that could be used to keep saws in order. According to the Greeks, the invention of the saw was ascribed to Dædalus, or his pupil Talus. This most certainly is a mistake, as centuries before their time the outline of a saw was inscribed on the Egyptian Obelisks.

The first saw-mill was erected in the Island of Madeira in 1420; and the next at Breslau, in Austria, in 1432.

From the Syriac translation of the Bible we find that Pumps were invented by Otesibus of Alexandria, 224 B. C., and were wholly or partially made of cast brass or bronze.

BUSINESS MANAGER OF ARCHITECT: A claims that a 2x6 inch brace, with the upper end nailed to the plate and the lower end to the floor, is stronger than if the same piece was placed vertically, and the upper end nailed to a stud and the lower end to a joist. Your decision is respectfully desired, as B claims the latter method is much the best, as the brace is liable to sag if nailed the way A suggests, and is therefore liable to interfere with the "plumb" of the building.

L. A. & R. B., S. F.

We think the former method is the stronger, although it is hardly as convenient as the latter, which is the one generally employed in this State. In the latter method, the strain is upon the nails that secure the plate to the stud; while in the former, the plate is held by nails in the several studs, and therefore a brace from it to the floor should keep the side of the building stiffer, than if nailed to only one stud. We do not think the sagging of the brace as mentioned by B will interfere with the "plumb" of the building. It would cause such a small difference that it could not be noticed with the plumb bob.

OUR CABLE ROAD MANAGERS should take precautions against passengers getting out on the side farthest away from the sidewalk. How would the Chicago plan do in this city, of having a small wire gate on the side toward the middle of the track and thus compel travelers getting out on the safe side. It is safe for passengers sitting on the dummy, as they can easily see ahead; but passengers on the rear platform are not so fortunate. A bar or wire gate across the inner side of front and rear platforms would, we think, materially lessen the numerous accidents that occur.

BUSINESS MANAGER OF ARCHITECT: Some time ago I had some red paint sent to me to be used on a barn. A few months after I applied it, it began to peel off. My neighbors say the paint was very much adulterated with brick dust. How can I tell whether such is the fact or not?

R., Sonoma Co.

Take some of the paint (as dry as possible) and heat it gently until the water and oil have been evaporated. Place some of the dry paint in a crucible, and pour upon it dilute nitric acid in quantity enough to dissolve the mass. The acid will dissolve the lead, but leave the brick dust behind. Wash the dust in water, and after drying send it back to the firm from which you obtained the paint, and we have no doubt they will cheerfully forward you the pure red lead.

AN IMPORTANT FACT.—Sheet lead is sometimes placed at the joints of stone columns, with a view to equalize the pressure, and thus increase the strength of the column. But experiments have proved that the effect is directly the reverse, and that the column is materially weakened thereby. Does this singular fact apply to cast iron, and other materials?

IN ANSWER TO A YOUNG PAINTER in Sacramento we would say, that the action of driers in paint is not thoroughly understood. They are put in to cause the oils to thicken and thus solidify more rapidly. The drying of linseed oil is caused by the absorption of oxygen, and there is no doubt that for the most part, driers act as carriers of oxygen to the oil, a very small quantity producing considerable effects. The best driers are litharge, acetate of lead, red lead, sulphate of zinc, etc., etc.

"Theophrastus, quoted by Pliny, attributes the first use and digging of stone from the quarry to Carmus, grandson to Agénor, King of Tyre. Bricks, which were in use from the earliest ages, being mentioned in Holy Writ, would no doubt have continued in use, had not Nature at last discovered to those who dug for that poor material, her mines of freestone and marble, which then promised a longer duration; and on the discovery of stone men naturally conceived the idea of nobler and more magnificent structures."

Our Illustrations.

Plate 1 presents another proof of the growing popularity of this journal throughout the Eastern States. Mr. Gulbranson of Boston has kindly furnished us the designs and plans shown in plate 1. It is well suited to the taste and fancy of many who having the proper site for such an edifice, will appreciate its peculiarities and picturesque appearance. It is designed and adapted for a country residence, but some of its special features may be found in erections in this city, in buildings in which the owners have sought the "something new" more than appropriateness in city architecture.

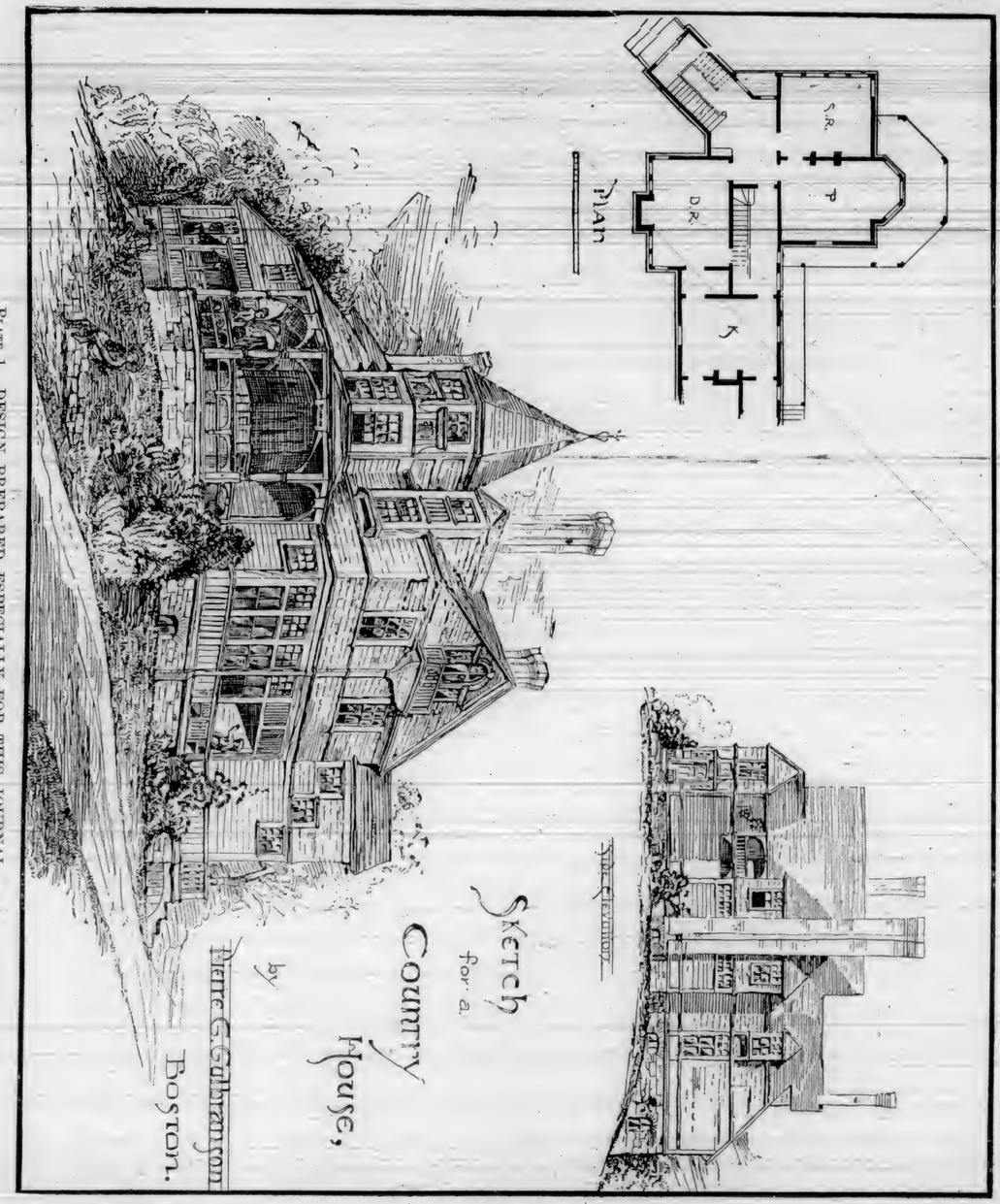
Front elevation and ground plans, plates 2 and 3, are those of a residence erected by us in 1876, for Mr. John W. Coleman, at the northeastern intersection of Eighth and Brush sts., in the city of Oakland. During successive years, moderate enlargement and improvements followed, until in 1881, a thorough change was made, producing the elevation and plans as shown by plates 4 and 5. While a considerable portion of the original building is utilized in plate 3, all distinctive traces thereof are obliterated.

In affecting the last alteration, cost and expense were held secondary to elegance and comfort. While not attempting to aproximate the *magnificient* palatial homes that we read about, yet in all that is necessary to real comfort, and a very *considerable* degree of elegance, is to be found in the residence under notice, equalling in numerous particulars the grandeurs to be found in edifices costing thrice the amount expended in this case. As a whole, Mr. Coleman's premises and improvements rank with the finest and most desirable in Oakland.

Labor Strikes.

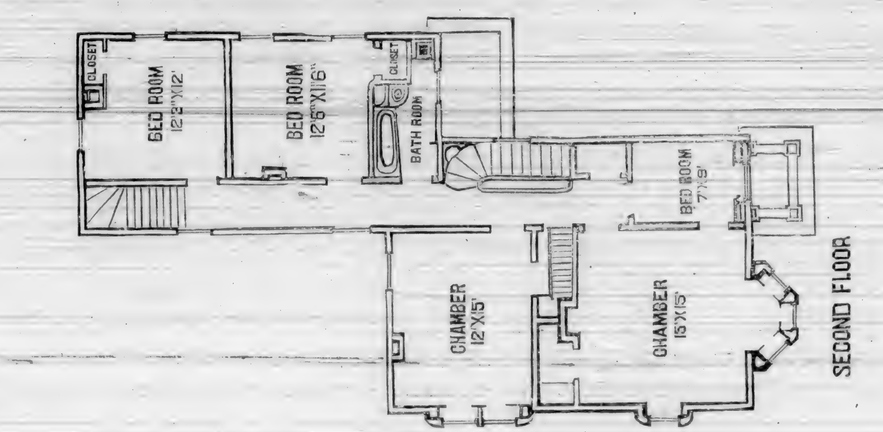
The New York *Times* contains a sensible editorial upon the effects and causes of the strikes in the building trades which have been so numerous this season. In no other branch of industry has it been found practicable to increase wages to such an extent as in that of building, and the *Times* rightly regards the advance as excessive, and as likely to lead to a considerable reaction. There is no question that in New York, where the strikes have been most numerous and successful, building has been materially checked, and although the structures now in progress must be completed, the volume of new work is likely to be much smaller at the end of this season than it was a year ago. It was found that the great increase in prices which took place early last year attracted so many newcomers to the city that the rates of wages which the workmen regarded at the beginning of the summer as much too low to satisfy their needs were with difficulty sustained until the autumn, and a similar course of events is inevitable in the future. As the *Times* says, strikes are almost always the precursors of a period of stagnation and dullness in trade. So long as a business continues brisk, and with good prospects for the future, the competition among employers for good workmen insures a quiet but steady advance in the wages of such men; but when the limit of the market is reached, and the outlook begins to be unfavorable, the advance ceases, and the inferior workmen then, with characteristic impudence, endeavor to secure by force what they find cannot be had in the natural course of events. For a time the employers, bound by their contracts, are compelled to yield, but the completion of every contract throws upon the labor market a certain number of unemployed men, and a comparatively slight diminution in the total volume of building operations leaves a residuum of workmen in each trade who must compete with their fellows for such wages as they can get.

PLATE 1.—DESIGN PREPARED ESPECIALLY FOR THIS JOURNAL.



FRONT ELEVATION.

PLATE 2.—BEFORE ALTERATION.



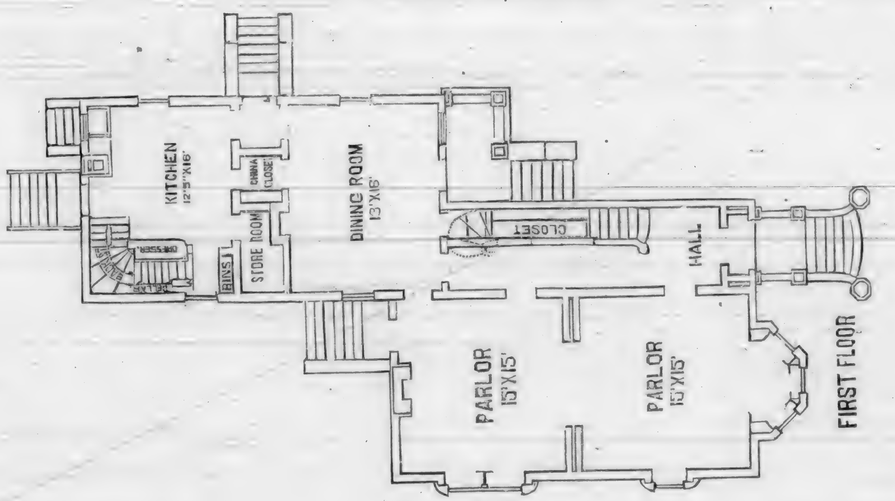


PLATE 3.—BEFORE ALTERATION.

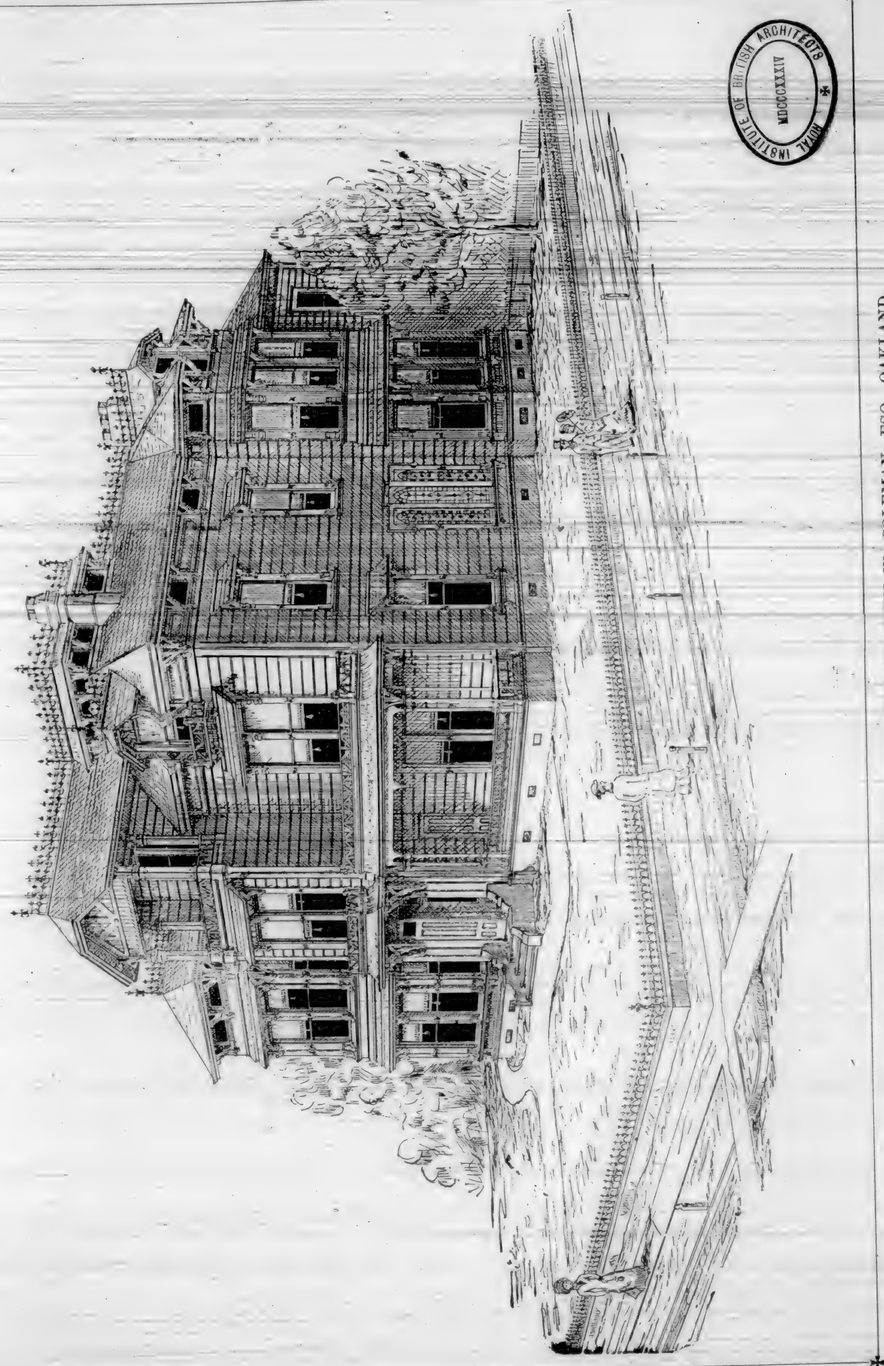


PLATE 4.—AFTER ALTERATION—RESIDENCE OF JOHN W. COLEMAN, ESQ., OAKLAND.

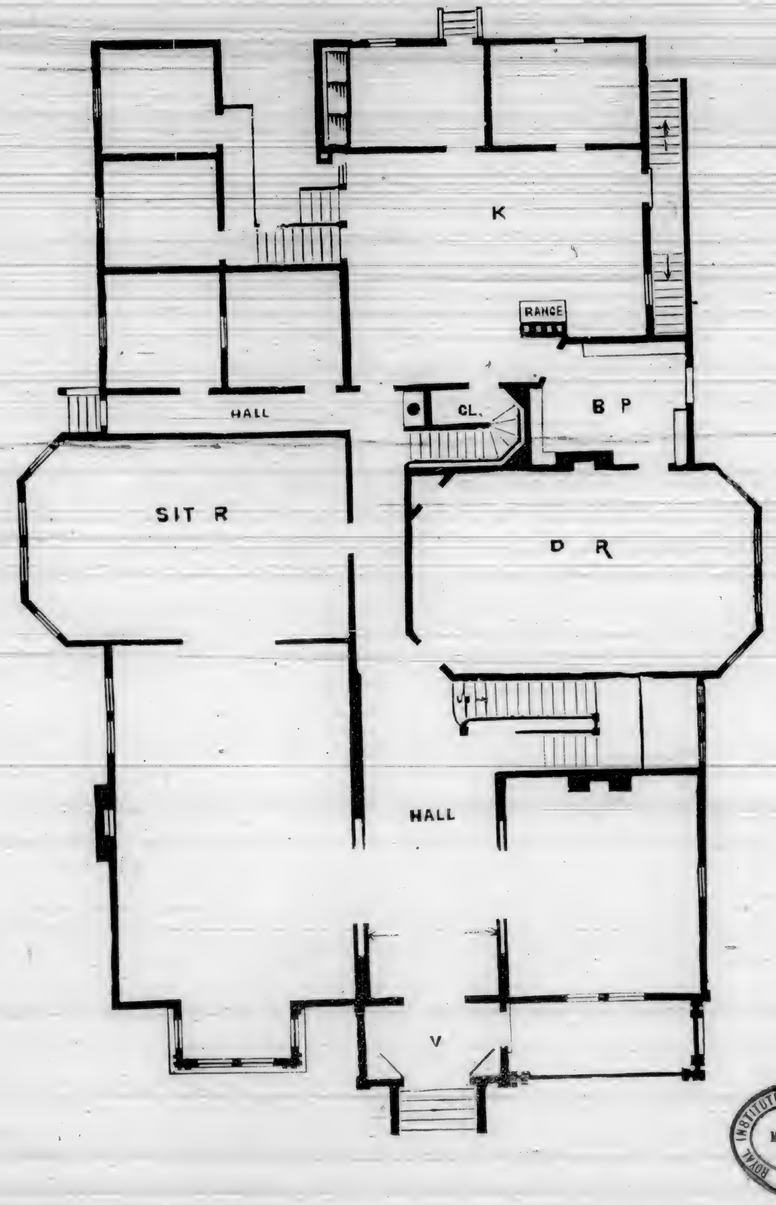


PLATE 5.—AFTER ALTERATION.

THE FRANKLIN GIRDER.

THE MOST ECONOMICAL CONSTRUCTION

— OF ANY MODE AND AT A —

PRICE OF ABOUT ONE-HALF

OF THOSE IN COMMON USE

OF SAME LENGTHS,

— AND TO SUSTAIN —

EQUAL SAFE LOADS.

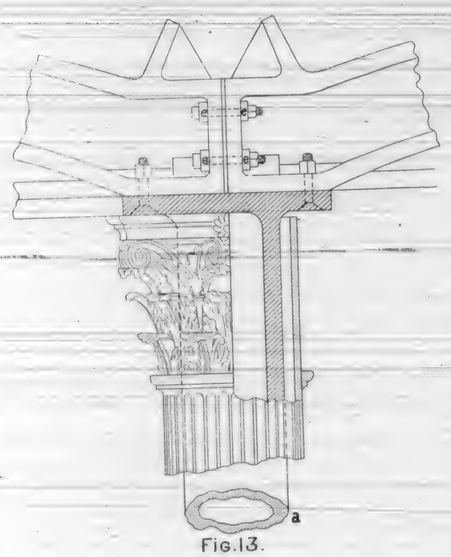


Fig. 13.

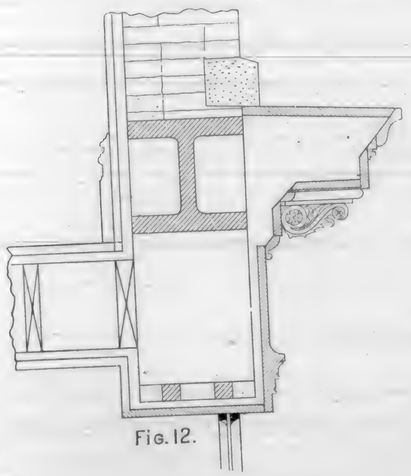


Fig. 12.

Employing Cast Iron compressively in every part, without taxing in the least its comparatively feeble tensile resistance,

AN OBJECT NEVER BEFORE ATTAINED.

Cast Iron possesses the enormous compressive resistance of 93,000 pounds to every square inch of cross section. The great objection to cast iron, caused by contraction of the parts in cooling, the heavier parts controlling and drawing away from the lighter parts, producing inherent weakness in tensile strain—does not in the least impair its strength when compressively employed. The Value of this Invention has been most favorably commented on by the scientific press of this country, London, Paris, and Germany. It has also been received with much favor by the Professors of Civil Engineering of many of the Colleges of this country, as well as Engineers engaged in Railroad and Bridge Construction.

These Girders for Architectural use are made of any length, and to sustain any required load—the safe to the breaking load being in the ratio as one is to three—and at a price of one-half of those in common use in this city.

A TWENTY-FIVE-FOOT GIRDER, with Brick work on it, is now in front of Premises, No. 231 First Street. Suitable to sustain 100 tons. Price, $200. Wrought Iron Girders to sustain same load and of same length, will cost double that Amount.

FIGURE 13

Represents the ends of two long Girders spanning the entire fronts, bolted together, and bolted to a Patent Fire-Proof Column—a Substantial Construction to resist Fire and Earthquake disturbance.

FIGURE 12

Shows the Girder encased with the Cornice, Frieze, and Soffit.

Prices given for any Length of Girder, and to Sustain any Weight.

P. H. JACKSON & CO.

2 CALIFORNIA ST., and 231 FIRST ST., SAN FRANCISCO.

UTILIZE YOUR BASEMENT APARTMENTS

In the Business Part of the City by using

HYATT'S PATENT ILLUMINATING ROOF

— AND —

BASEMENT EXTENSION.

THE LENSES MAGNIFY, HEAT, AND DO NOT BREAK.

SEE ALL NEW BUILDINGS ON THE BEST BUSINESS MART.

The present dark, damp Cellars, or Coal Vaults, of old buildings made light, cheerful, and well-ventilated Business Apartments suitable for Offices.

Read the following of the many Testimonials received:

LEVI STRAUSS & Co., Importers, 14 and 16 Battery Street,
SAN FRANCISCO, March 4, 1881.

MESSRS. P. H. JACKSON & Co., No. 2 California Street:

The alteration made by you by cutting out the six door sills and risers on the front part of our store, 14 and 16 Battery Street, and substituting HYATT'S PATENT ILLUMINATING ROOF, is quite satisfactory in making in the basement apartment below, in the front part, all that we could desire as regards light. **Our entry clerks are now able to work without the use of gas.**

LEVI STRAUSS & CO.

The **Basements of Messrs. Murphy, Grant & Co's Buildings,** on Bush and Sansome Streets, have been altered and are now lighted by this Improvement.

HYATT'S PATENT

FIRE AND BURGLAR-PROOF SKYLIGHTS.

The public are requested to examine the large Skylights now being erected on the rear of **A. B. McCreery, Esq.'s, Building,** corner Pine and Davis Streets; also **Senator Fair's Building,** corner Sansome and Pine Streets. By the use of these heavy Skylights, which are both fire and burglar-proof, **no extra charge in rates is made by the Insurance Companies than if no Skylights were used,** as they are not destroyed by fire, like the wood and sheet-iron skylights in common use; besides the occupant of the premises may feel his goods are safe from robbers during the time the building may be closed.

☞There are many deep stores in this city that are much in need of light, and by an addition of these Skylights all light can be obtained, besides security against thieves is maintained.

The appearance of the Skylight, as seen from the front of the store when the sun is on it, glistens with the thousands of hexagon lens. The Cosmopolitan Building, as altered, has these Skylights on the rear of the deep stores.

P. H. JACKSON & CO.

Sole Licenses and Manufacturers for the Pacific Coast of Hyatt's Patents,

No. 2 California Street and No. 231 First Street,

SAN FRANCISCO.

Foul Air in School Rooms.

It is seldom that an assembly room of any kind can be found in which the air is not overcharged with impurities. Some of the worst rooms we have known have been those in which the air ought to have been the purest, namely, school-rooms. Yet it is seldom, we trust, that the conditions obtaining in school-rooms are quite as deleterious as those found recently in the Packer Institute, Brooklyn, a well endowed school for young women. In response to persistent complaints by the young ladies the "Sanitary Engineer" had the air of the class rooms analyzed, finding in some of them "an amount of impurity present greater than in a crowded theater, in smoking cars, and three times as great as in the public schools of Boston or Philadelphia."

Our contemporary pertinently remarks that such an institution "should be able to claim not only that it furnishes the means of mental culture, but that its pupils are supplied with at least as pure air as is found in the public schools of Boston and Philadelphia. Certainly, this is not a very high standard, but to secure it the amount of air supply in the Packer Institute must be quadrupled, and the amount of heating surface largely increased."

A more outspoken statement of the case by the "Times" says that "there were two classrooms in which the proportion of carbonic acid found in the air was twice as great as that present at 11 o'clock at night in the pit of two of the worst ventilated London theaters, and was only exceeded, according to Buck's tables, by that detected in a few German schools, and in the English mines."

To send young people to study in such an atmosphere is simply criminal.—Scientific American.

Plumbers Brought Under the Law.

A plumber is no longer, in the cities of New York and Brooklyn at least, an ordinary person following a private avocation which he may take up or lay down at will without the knowledge or interference of the powers that be. He is distinguished above his fellow-citizens by being registered at the Health Department, his designs upon the community are known and officially recognized, and he is, in short, a marked man. To pursue his calling without thus placing himself on record subjects him to the penalty of a misdemeanor. We alluded the other day to the distinction which lightning-rod men have recently enjoyed, in the holding of a congress of European scientists with sole reference to the uses and abuses of their art. The Plumbers' Registration Act is also, in its way, a sort of promotion of a hitherto obscure and unorganized trade to something like official rank. There is an increment of dignity to its followers, but none at all of emoluments—these, it is popularly supposed, being already of almost princely magnitude.

The whole truth about plumbers can probably never be known, and the logical relation between the benefits they render to mankind and the bills they present will always remain a gloomy mystery. That they deal with the most vital of sanitary conditions, and have it in their power to prolong or abbreviate human life to an extent unknown to any other of the mechanical trades, is sufficiently clear. There is an evident reason why a man should not be permitted to sell gunpowder without a license; and a man who deals in sewer gas it quite as powerful for mischief—much more so, in fact; inasmuch as he finds his way and carries his wares into the most peaceful and unsuspecting households. The poisonous elements which it is his duty to restrain and conduct safely away he may, in indifference if not in malice, turn in full activity upon a host of victims. There is not much to choose between dying by pestilence or by explosion—or rather, the preference should be decidedly given to the speedy over the lingering process. No prudent housekeeper would put a keg of gunpowder in the cellar, or a toy pistol in the hands of the children; but where either or both of these have slain their thousands, defective plumbing has destroyed its tens of thousands, and so insidiously that when the blow falls, or whence it comes, no man is able to determine.

Under the present act, which was passed by the legislature of New York and went into effect on the first of March, nothing more is required than that every plumber shall register his name and location at the Health Department, and that all work of this description in buildings hereafter erected shall be under the control of that department. It has been judiciously remarked that while these are wholesome measures, they do not go far enough to insure the public safety. There is no provision by which plumbing done in buildings now standing can be brought up to the proper degree of thoroughness; there is no qualification required, no evidence of competency, skill, or previous experience on the part of the individual who enrolls himself as a plumber, and by so doing acquires a sort of certificate of fitness for his work, or what will be very generally received as such by his customers. Something of this kind—not an examination in the dead languages, or the Binomial Theorem, but a test such as a competent plumber would himself apply to a workman seeking employment—would be eminently proper, and would give a largely increased sense of protection as a result of the new system. But a step in the right direction has at least been taken, and one which will, no doubt, lead in the fulness of time to such complete regulation of this industry as will afford all possible safeguards to the life and health of the community.—*Mechanical News.*

A Few Kindly Words.

It has been, and will be, our purpose to vitalize and stimulate among the Architects of S. F. those better sentiments and more kindly and fraternal feelings and relationships, which should control and characterize the acts of men assuming the practice of so honorable and responsible a profession as the Architectural; and if the harvest of results has not been so abundant as desired, there is this one solid source of comfort; that the yield thus far gives promise of much greater in the future.

There are two inevitables in the social, business and professional intercourses and relationships of life, viz.: that the deportment, manners, bearings, and acts of individuals or classes of men toward each other, by a natural law of the human mind, lead either to mutual and kind, equitable and right understanding, and results pleasing and honorable in character; or to the opposite of these, stimulated and controlled by the lesser impulses, passions, and debasements of heart and nature.

The men of all professions are supposed to possess and are looked up to by the non-professional classes as possessing, more than ordinary infirmities, intelligence and integrity; and so far as they sustain and justify this enviable distinction, they are trusted and honored. But when from any cause, incentive, or motive whatever, they drop down from this higher and more honorable position, and pursue practices and incivilities among themselves and toward each other, calculated to lower and lessen their advantages and influence, it naturally follows that the "outside world" should lose confidence and sneer at those who might, but fail to, protect their own best interests; and virtually forbid and drive away the confidence and respect which might be secured and maintained by the simple observance and exercise of those better and purer qualities of mind and heart, which elevate our common humanity above all lesser thoughts, motives, and actions; and inspire to undeviating kindness and earnest efforts for the promotion of the welfare of others, as well as our own.

It is this enlarged and more generous principle of action, which has led to the development of tens of thousands of noble charities, and works of enterprise and benevolence; and thrown open the doors of thought all over the world, producing numberless results in art, science, and mechanism, which otherwise might never have been revealed. It is the mingling and commingling—the comparing and burnishing of thought with thought in individuals—that lead to new revealments; and the facts of history clearly prove that no one man has ever "learned it all" in any department of human affairs, and that the wisest and best of men have acquired the better knowledge possessed, only through earnest study and contact with other minds: while those who rely upon their own unaided selfish knowledge of things, soon pump the well dry.

French Architects' Fees.

An important decision has lately been delivered by the Third Chamber of the Civil Tribunal of the Seine, which determines the much-disputed point whether the fee or honorarium of an architect should be reckoned on the limit price fixed before competition, or on the amount of tender accepted. M. Bourdeix, architect, had been commissioned to prepare the plans of a house for M. Jacobi. Various contractors submitted tenders more or less below limit price, the reduction in one case amounting to over 35 per cent. As a rule, in France, the construction of a building is not undertaken by one, but by several contractors, each taking his own particular branch, such as masonry, carpenter's work, plumbing, etc. When the time for payment came, M. Bourdeix, to whom all accounts were submitted, settled with the contractors at the price of their tenders, but claimed from M. Jacobi 5 per cent. on the original limit prict (*devis*). This claim was contested. The owne. paid into court 5 per cent. upon the sums actually dispersed. The tribunal, however, decided that M. Bourdeix was entitled to percentage on the full *devis*, basing its judgment on the ground that all the contractors, having tended considerably below the limit, more care and supervision were necessary on the part of the architect to insure good quality in the work. This decision will no doubt be accepted as regulating fees, and will make a considerable difference in the incomes of many French architects.—*London Architect.*

Morton's Sash Chain.

Since the introduction of these chains in this market, the inquiries in regard to their stability and usefulness have been very general. The inventor has sent samples to the principal architects, so that all erecting buildings may judge of the *vast superiority* of these chains over the now old-fashioned sash-cord. If these chains are put on according to directions, and have the size correspond to the weight of sash, they are guaranteed for years. If not absolutely misused, they will be just as good ten years hence as when first put on.

Circulars with price list may be had by application to the inventor, Thomas Morton, 65 Elizabeth St., New York City. Samples may be seen at the principal architects' offices.

If it is true, as sanitary writers declare, that planting sunflowers about the premises is a preventive of malaria, then Oscar Wilde may not have lived in vain.

Water Waste.

BY PROF. HENRY ROBINSON, C. E.

One of the most fruitful causes of waste of water in houses has been found to arise from the direct flushing of the closets from the water pipes. The rule in England is to prohibit this, and to require the insertion of a small service box supplied by the service pipe, and containing about two gallons of water. This being in direct commnnication with the valve of the closet, prevents more than a regulated amount of water being used at each flush of the closet. It has been found in practice that, without such an arrangement as this, enormous waste arises, and it cannot be too strongly urged on those who have to advise in the regulation of water supply in large towns, to adopt the most stringent rule on this point. Besides the prevention of waste, the introduction of such an appliance as the service box reduces the pressure to a uniform head, which would not be the case were the flush to be taken direct from the service pipe; and beyond this, it is found that any leakage in connection with a service box is attended with inconvenience to the householder, and this results in the prompt rectification; whereas, a leak direct into the closet might continue without inconvenience to the inhabitants, but with certain loss to the water company.

Glasgow may be quoted as a town where excellent rules are in force. The regulations here are that no water closet is to be supplied direct from a service pipe, but must be supplied from a cistern on the same flat as the closet, and no water closet is to be supplied by a tap of any kind. Also, that every cistern for the supply of a water closet must be fitted with an efficient waste-preventing apparatus, so constructed as not to be capable of discharging more than two gallons of water at each flush, and so that it can not be made to flow continuously, either by intention or neglect. It is further required that the cistern must contain from five to eight flushes in all places where the supply of water is not constant. Also, that the cisterns supplying all pan closets must have a proper service box attached.

Leeds is another large town which may be referred to. Here the regulation is as follows: Every water closet has to be provided with a service cistern of lead or cast iron, with a ball cock attached thereto, and every such service cistern has also to be provided with a proper double valve waste preventer; and every such valve or valves has to be so arranged as to let down at each pull or lift of the valves a quantity of water not exceeding two gallons. Also, that no pipe by which water is supplied to any water closet is permitted to communicate, directly or indirectly, with any part of such water closet, or with any apparatus connected therewith, except the service cistern thereof. In London also, the water companies have strict rules requiring the use of waste water preventers.

The above regulations may be regarded as being the outcome of the practical experience of English water engineers. In the water works with which we are connected, we have similar rules, and require them to be rigidly enforced. We do not consider that any alternative, such as specially devised valves, however ingenious, ought to be introduced. There exists a great amount of recorded experience in England, all pointing to the same conclusion, and all indicating the saving that has been effected by putting into force such rules as have been given.—*The Sanitary Engineer.*

Watch-making machinery has been brought to such perfection that screws are made with it, having nearly 600 threads to the inch. It takes 144,000 of them to weigh a pound.

Market Reports.

LUMBER.—Our merchants all report an increasing trade. Prices have not undergone any change as yet.

Receipts since January 1st, 1882:

Lumber	45,679,982
Shingles	12,416,372
Laths	6,102,360

A correct price list of lumber will be found below:

Pine.

Common Rough, up to 40 feet, per M feet	$22 50
" 41 to 50 " "	23 50
" 51 to 60 " "	24 50
" 61 to 70 " "	26 50
" 71 to 80 " "	28 50
Refuse Rough "	18 50
Common Rough, sized with planer $2 additional on above rates, per M feet.	
No. 1 Flooring, 6 inches and over, "	32 50
" " and under, and 1¼x4 and 1¼x6	35 00
Flooring and Stepping	35 00
Rough Clear for Flooring, $1 less than above rates.	
Second quality Flooring and Stepping.....per M feet	27 50
Ship Plank, Rough "	28 50
" Planed 1 side "	32 50
" " 2 sides "	35 00
Deck Plank, Rough "	33 50
" Dressed "	37 50
Laths per M	3 75
Wool Slats "	10 00
Shakes "	12 00
Redwood Posts per piece	17½

Redwood.

Rough Merchantable per M feet	22 50
" Refuse "	18 50
Surface No. 1 "	35 00
" 1 x 6 "	32 50
" No. 2 "	27 50
Rustic, No. 1, 1 x 8 "	32 50
" No. 1, 1 x 10 "	35 00
" No. 2 "	30 00
" Under 10 feet "	30 00
T. & G., ½ x 4 and 1¼ x 6 "	35 00
" 6 in. 12 ft. and over "	32 50
" " 7 to 11 feet "	30 00
" " under 7 feet "	27 50
" " No. 2 "	27 50
T. & G., Beaded, 12 feet and over "	35 00
" " 7 to 11 feet "	30 00
" " under 7 feet "	27 50
Half-inch Surface "	30 00
Pickets, Fancy "	27 50
" Rough, Pointed "	20 00
" " Square "	17 50
Siding, ½ inch "	25 00
Shingles per M	2 50
Battens, ½ inch, lineal feet "	1c

NAILS AND HARDWARE.—All kinds of hardware are very firm in prices.

NAILS.—Since January 1st, 1882, we have imported 56,200 kegs.

10 to 60 pennies, are quoted at		$4 25
8	" "	4 50
6	" "	4 75
5 and 4	" "	5 25
4 and 5 pennies, brad heads, at		5 50
6	" "	5 75
8	" "	6 00
10 and upward	"	5 25
3 penny fines	"	7 75

PAINTS.—A new company has made its appearance, introducing the OMAHA WHITE LEAD. With the large demand that is confidently expected this year, the agents should be able to control a fair amount of patronage.

The PIONEER brand has been successfully introduced into every town and hamlet on the Pacific coast, and has given universal satisfaction. We quote price at 8 cts. per lb.

The above is an illustration of one of those useful inventions that have been lately made, and is one of the few that seem destined to live through the coming years, on account of its simplicity and strength, and the ease with which they may be applied. Very few tools are necessary to insert this safe-guard against burglars. A 13--16 inch bit for the bolt, a smaller one for the thumb key, a small screw-driver and a chisel are all that is required. Since their introduction in this market, they have almost superceded every other bolt; and in every village and hamlet on the Pacific Coast, samples may be seen of the Ives Burglar-Proof Door Bolt; manufactured by Hobart B. Ives, New Haven, Conn.

Honest Plumbers in Edward III.'s Time.

What has become of the plumbers' ordinances approved by Edward III. in 1357, which ordain "that every one in the trade shall do his work well and lawfully?" How much pleasanter a world this would be if the plumbers had only continued to do their work "well and lawfully!" A legion of fevers would never have carried off their holocausts of victims; many of our finest and most historic mansions would not have been burned down through the careless leaving of lighted braziers, and untold sovereigns would have been saved to house owners and occupants. It is matter for serious consideration whether, considering the vital importance of plumbers' work, it should not be more strictly looked after. Certainly any system of house inspection, whether compulsory or voluntary, to be efficient, must comprise a more particular inspection of plumbing than is usual at present. It is one thing to inspect the drainage system of a house, and quite another to inspect the workmanship of pipes and joints. In the days of Edward III. the plumbers—in theory at any rate—were men of uncompromising honesty, for they were forbidden by their own ordinances to buy up lead "to the damage of the commonalty."—*Land.*

Building Intelligence.

A very full report is published in this issue. It will be seen that the erection of buildings in every portion of the State is increasing in a manner that is delightful, to behold after the dull times of the past four years.

PERFECT ACCURACY IN STATEMENTS is the motto to which we have bent our energies. We make it a point to be careful in our estimates, so that no one may be misled. We have been informed that several of our estimates made in our list were not sufficient to cover the *whole* cost of the improvements. When the work is let separate it is very difficult to get the *exact* cost of all the different branches. When a building is under way it at once becomes an object for our canvassers to notice, and the contractor is "interviewed." Generally the amount of the carpenter's contract is easily determined; but if he has no control over the plumbing, plastering, etc., we have to make an estimate as near the truth as possible.

During the past month we have personally visited several towns, and made arrangements to have the "Building Intelligence" forwarded to us regularly each month. It is our intention to visit several towns each month, so that in a short time we will be able to present a full report from every part of the State.

SAN FRANCISCO.

Two-story brick building near junction of California and Market. Owner, Nicholas Luning; architects, Wright & Sanders; contractor, J. S. Burpbee; cost, $8,000.

Seventeen one-story frame buildings for stores, on Ellis, between Mason and Taylor. Owners, J. Morton & Co.; architect, Joe Gosling; contractor, G. A. Hastings; cost, $9,500.

Two-story and attic frame dwelling on northeast corner Green and Leavenworth. Owner, R. Carmany; architect, —— Smith; contractor, Gray & Stover; cost, $4,500.

Two-story frame, brick foundation, northwest corner Pine and Fillmore. Owner, G. F. Roberts; architects, Newsom Bros.; contractors, Moore Bros; cost, about $7,000.

Two-story, four-tenement house, on Washington, between Buchanan and Webster. Owner, Mrs. Tuttle; architect, —— Curtis; contractors, Thompson & Treadwell; cost, $2,500.

Two-story attic and basement frame dwelling on northeast corner Pacific Avenue and Steiner. Owner S. B. Welsh; architect, —— Smith; contractors, Gray & Stover; cost, $8,000.

Two-story and basement frame dwelling on Sacramento, between Pierce and Scott streets. Owner, H. Williams; architect and builder, W. H. Wharff; cost, $3,100.

Two-story and basement frame, on California, between Pierce and Scott. Owner, —— Easton; architect, —— Marquis; contractor, —— Perry; cost, $5,500.

Three-story frame building on Third street, near Townsend. Owner, P. Doherty; architect, T. J. Welsh; contractor, —— Doherty; cost, $3,700.

Two-story and basement brick building on Park Avenue, between City Hall Avenue and McAllister St. Owner, H. Wahmuth; architects, Schmidt & Havens; contractors, Walker Bros.; cost, $9,000.

Three-story frame, brick basement, on Howard St., between Seventh and Eighth. Owner, G. Monnier; architect, W. Mooser; contractor, B. H. Harding; cost, $14,000.

Two-story and attic frame dwelling on Twelfth Street, near Mission. Owner and builder, M. Doane; cost, $5,500.

Two-story frame dwelling on Stevenson, near Nineteenth. Owner and builder, P. Griffin; architects, Meeker & Banks; cost, $2,500.

One-story and basement frame on Laguna, between Ellis and O'Farrell. Owner, L. Zeiss; architect, W. Schrof; contractors, Walker Bros.; cost, $2,000.

Six two-story and basement frame on Golden Gate Avenue, corner Polk. Owner, W. Sharon; architect, —— Gaynor; contractor, W. M. Fletcher; cost, $28,000.

Third Street, between Howard and Folsom. Alterations and additions to buildings owned by —— Swift, Esq.; architect, E. R. Swain; contractor, W. M. Fletcher; cost, $10,500.

Additions to building 938 Geary Street. Owner, J. B. Wooster; architect, H. C. Macy; contractor, W. Evans; cost, $2,800.

Three three-story frame on Geary, between Polk and Van Ness Avenue. Owner, T. H. Buckingham; architect, E. R. Swain; contractor, F. Crowley; cost, $——

North side Geary, between Van Ness and Franklin. Two-story frame building for school house for Ladies' Protection and Relief Society; architect, J. C. Pelton; contractor, J. Blake; cost, $2,400.

Three-story frame, brick foundation, on corner Sutter and Buchanan. Owner, C. Jones; architects, Schmidt & Havens; contractor, F. Klatt; cost, $5,500.

Three-story frame on east side Taylor, near Geary. Owner, A. Morganstern; architect, W. Winterhalter; contractor, F. Weinoehl; cost, $6,000.

Four one-story and basement frame, on corner Lyon and Greenwich. Owner, F. Wasserbaum; architects, Townsend & Wyneken; contractor, Phil. Ferrety; cost, $3,200.

Alterations to three-story frame on Mission Street, near First. Owner, J. Tompkinson; day's work; $6,000.

Two-story frame on Mission Street, between Main and Spear. Owner, Payne Bros.; architect, H. Geilfuss; contractor, T. H. Day; cost, $1,600.

Three-story frame dwelling, on California, near Fillmore. Owner, Antonio Sturin; contractor, R. Cook; cost $2,600.

Repairs to two-story frame dwelling 2023 California street. Owner, H. Gerke; days' work; cost, $1,000.

Repairs to building 2507 Clay street. Owner, C. Wilson; contractor, R. Cook; cost, $2,500.

Repairs to building on Pine street, between Steiner and Pierce. Owner, A. J. Rulofson; architect, H. D. Mitchell; contractor, J. Geary.

Repairs to building 806 Bush street. Owner, Mrs. Hughes; contractor, S. M. Hills & Co.; cost, $2,800.

Two one-story frame dwellings on Olive Court. Owner, J. W. Cudworth; Contractor, A. N. Nelson; cost, $1,200.

Repairs to dwelling on Sacramento, between Fillmore and Steiner. Owner, J. Kehoe; contractor, R. Cook.

Two-story frame dwelling on Kentucky, near Sierra street. Owner, H. McCrea; contractor, B. F. Ellis; cost, $2,300.

Three-story frame building on Kentucky, near Sierra street. Owner, Bellman; Architect, G. A. Bordwell; days' work; cost, $5,000.

Additions to three-story frame dwelling on Howard, near First. Owner, J. McGrath; contractor, Jos. Dutton; cost, $4,000.

Repairs to building 71 Natoma. Owner, J. Daly; day's work; cost, $700.

Repairs, 707 Bush. Owner, S. M. Mouser; architects, Percy & Hamilton; contractor, Sanches; cost, $800.

Alterations on Washington, between Larkin and Polk. Owner, T. E. Smith; architects, Moore & Whittemore; contractors, Conrad & Miller.

Buildings on Fifth near Natoma have been lowered, and a new front put in. Owner, N. P. Perrine; day's work.

Two-story frame building on south side Fell, between Gough and Franklin. Owner —— Bailey; Architect, J. Gosling; day's work; cost, about $6,500.

Two-story frame dwelling on Third street, near Brannan. Owner, H. Toner; day's work; cost, $800.

Alterations to building on East street, between Mission and Market. Owner, M. W. Kain; day's work; cost, $1,500.

Two-story frame building on Mission, near Twentieth st. Owner, W. Rustemeyer; architect, H. Geilfuss; contractor, —— Girvin; cost, $3,500.

Two-story frame building on Haight street, near Webster. Owner, Abbott; architect, J. Marquis; contractor, Ingerson; cost, $5,000.

Four-story and basement brick building on north-east corner Post and Dupont. Owner, W. M. Lent; architect, J. P. Gaynor; estimated cost, $100,000.

Two-story and basement frame building on corn r Kearney and Greenwich. Owner, F. Layman; architects, Townsend and Wyneken; contractor, Plummer; cost, $7,500.

Repairs to buildings on Union, near Hyde. Owner, Hibernia Bank; architect, P. Huerne; contractor, Buckley; cost, $1400.

Repairs to dwelling on Howard, near Twelfth. Owner, Hibernia Bank; architect, P. Huerne; contractor, McCready; cost, $900.

Repairs, 1212 Pacific street. Owner, J. Lomax; contractor, S. M. Hills; cost, $550.

Additions to residence on Pine near Mason. Owner, J. R. Jarboe; architects, Curlett & Eisen; contractor, Creighton; cost, $4,000.

SACRAMENTO.

Two-story frame dwelling on H Street, near Eighth. Owner, Grove L. Johnson; architects, Babson & Seadler; contractor, E. A. Bovyer; cost, $5,500.

One-story and basement frame dwelling on corner Twenty-first and H. Owner, H. Kuhn; architect, N. D. Goodell; contractor J. White; cost about, $1,000.

One-story frame on P Street, between Thirteenth and Fourteenth. Owner D. G. Dickman; architect, N. D. Goodell; contractor, J. White; cost, $1,200.

Two-story frame dwelling on Fourth, between N and O. Owner, Chas. Sellinger; cost, $3,500.

Repairs to brick building on Second, between Q and R. Owner, Cronin; contractor, A. Henley; cost, $600.

Two-story frame dwelling on Twelfth, between K and L. Owner, Mrs. E. N. Butler; contractor, W. H. Mead; cost, $1,700.

Two-story frame dwelling with attic and brick basement. Owner, Mr. Mohr; architects, Babson & Seadler; contractors, Carle & Croly; cost, $7,000.

One-story frame, brick basement, corner J and Eleventh. Owner, Thomas Armstrong; builder, J. Fitzpatrick; cost, $2,000.

Two-story and basement brick building on J Street, between Tenth and Eleventh. Owner J. Greisel; architect, N. D. Goodell; contractor, M. Madden; cost, $5,000.

Two-story frame brick basement, corner Tenth and M. Owner, J. Nottingham; architect and builder, M. Madden; cost, $4,500.

Two-story frame, brick basement, on N Street, between Sixth and Seventh. Owner, Capt. Dwyer; architect and builder, M. Madden; cost, $4,000.

Two-story frame, brick basement on H Street, between Fourteenth and Fifteenth. Owner, H. S. Letner; architect, N. D. Goodell; contractor, M. Madden; cost, $9,000.

Two-story brick building corner Twenty-eight and M. Owner, Scheld's Brewery; architect and builder, M. Madden; cost $5,000.

One-story and basement frame dwelling, corner T and Sixteenth. Owner, R. Nuttall; architect and builder, M. Madden; cost $1,800.

Two-story brick stable between I and J, Eighth and Ninth. Owner, E. A. Burr; architect, N. D. Goodell; contractor, M. Madden; cost, $850.

One-story and basement frame cottage corner Twenty-first and M Streets. Owner G. Wendt; architect and builder, M. Madden; cost $1,500.

Repairs and additions to Union Brewery corner Twentieth and O Streets; contractor, M. Madden; cost, $800.

Alterations to Pacific Brewery, corner Ninth and P; contractor, M. Madden; cost, $500.

One-story frame cottage on Tenth and W. Owner, John Bockoff; contractor, M. Madden; cost $900.

Additions to one-story frame on Fifth Street, between O. and P. Owner John Friend; contractor, M. Madden; cost $600.

Alterations to frame dwelling 708 L Street. Owner M. Everett; contractor, A. P. Andrews; cost, $500.

Repairs to brick building corner Twelfth and H. Owner, P. Bohl; day's work; cost, $800.

Two-story frame with basement on H Street, between Thirteenth and Fourteenth. Owner, H. Barchers; architect, J. Ough; contractor, J. White; cost, $6,000.

Two-story and basement frame dwelling on N Street, between Eleventh and Twelfth. Owner, C. N. Hartwell; architect and builder, J. Ough; cost $5,000.

German Evangelical Church on Tenth Street, between O and P; architect, A. A. Cook; contractors, Fallner Bros.; cost $3,000.

Two-story frame, brick basement, on Fourth Street, between N and O. Owner, Chas. Sellinger; architect, N. D. Goodell; contractor, J. White; cost, $3,500.

One-story and basement frame, on Twenty-first and H. Owner. A. Kuhn; architect, N. D. Goodell; contractor, J. White; cost, $1,000.

One-story frame on Twenty-third, near F. Owner and builder, J. Middlemiss; cost, about $650.

One-story frame on Nineteenth and M. Owner, A. T. Driver; builder, —— Traynor; cost, $900.

One-story and basement frame dwelling on Sixteenth and N. Owner, F. Schnouff; builders, Vandercook & Murdock; cost, $2,000.

BERKELEY.

Three-story frame, brick foundations, on Atherton Street. Owner, Harmon Seminary Company; architect, G. C. Meeker; contractor, R. McKillican; cost, $18,000.

One-story frame corner University Avenue and Walnut Street. Owner, J. H. Atchinson; contractor, C. R. Lorl; cost, $1,800.

Two-story frame building. Owner and builder, Geo. A. Embury; cost, $2,000.

One-story frame on Shattuck Avenue. Owner, Mrs. F. Clark; contractor, A. H. Broad; cost, $800.

Two-story frame on Shattuck Avenue. Owner, Samuel Wakehani; contractor, A. H. Broad; cost, $1,500.

One-story frame on Audubon Street. Owner, Chas. Hedges; contractor, A. H. Broad; cost, $2,600.

Large green house on the grounds of Capt. Ainsworth; architects, Matthews & Son; cost, $10,000.

SEATTLE.

Three-story frame building, brick basement, on corner of Fifth and Spring Streets. To be used for a hospital, and owned by the Sisters of Mercy; contractors, Wright Bros.; cost $17,000.

Two-story brick building on corner Commercial and Washington. Contractor, John Keenan; cost, $16,000.

Two two-story frame dwellings corner Second and Senaca. Contractor, D. B. Jackson.

ALAMEDA.

Three one-story and basement frame dwellings on corner of Oak and Alameda Avenue. Owner, J. Maristaney; architect, C. F. Mau; cost, about $6,000.

One-story and basement frame on corner of Buena Vista Avenue and Minturn Street. Builder and owner, J. J. Stachler; cost, $800.

Two-story frame corner Walnut and Central Avenue. Owner, Henkel; contractor ——Dencke.

One-story cottage on west side Pearl Street, between Central and Encinal Avennes Owner, C. P. Robinson; builders, Gilbert & Brown; cost, $2,000.

One-story and basement cottage on Railroad Avenue, near Webster. Owner, A. Hoffman; cost, $2,000.

One-story frame dwelling on Pearl Street, near Central Avenue. Owner, E. J. Robinson; cost, $1,600.

Two-story frame residence on Central Avenue. Owner, Mrs. M. E. Farvis; cost, $3,400.

WOODLAND.

One-story frame building on corner Second and Lincoln Avenue. Owner, —— Culver; contractor, Joe Caldwell; cost, $1,950.

One-story frame building on Second Street. Owner, —— Green; contractor, Amsberg & Co.; cost, $1,700.

One-story frame on North Street. Owner, Mr. Garoutte; contractor, W. Carson; $1,675.

The old Masonic Lodge is being altered into a lodging house; day's work; cost, about $500.

Frame building for wagon-shop. Owner, F. Knox.

Frame dwelling. Owner, C. H. Garoutte; contractor, W. H. Curson.

LOS ANGELES.

Two-story and attic frame dwelling. Owner, Hon. J. F. Crank; architects, Curlett & Eisen; day's work; cost, $15,000.

STOCKTON.

The building on the corner Main and California is being altered so as to be used for a theater. Owners, Southworth & Humphrey; architect, Chas. Beasley; contractor, Carle & Croly; cost, $11,000.

One-story frame on California Street. Owner, H. E. Stoetzer; contractor, A. Ehmann; architect, H. Geilfuss; cost, $1,500.

PORTLAND, OREGON.

First National Bank is erecting a large brick building; architect, Clinton Day; cost, $75,000.

CALISTOGA.

Frame dwelling and stable near town. Owner, A. L. Tubbs; architect, Clinton Day; cost, $18,000.

OAKLAND.

Two frame cottages on Market, corner Fourteenth. Owner, —— Parize; contractor, A. Herbst; cost, $3,000.

Two-story and basement frame on Clay, between Fourteenth and Fifteenth. Owner, Dr. Reilley; contractor, J. E. Hannah; cost, $3,000.

Four one-story and basement frames on corner East Twelfth and Second Avenue. Owner, C. L. Taylor; architects, Taylor & Copeland; contractors, Hitchcock & Bandin; cost, $7,500.

Repairs to frame building on Broadway, opposite Fourteenth. Owner, F. Blake; day's work; cost, $1,000.

LINCOLN.

Two-story frame building. Owner, Henry Nader; architect, N. D. Goodell; contractor, J. White; cost $3,000.

EUREKA, H. B.

The Odd Fellows are erecting a new building. Contractor, Jas. Simpson; cost, $18,500.

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The California Architect and Building News.

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Building Prosperities.

During the current year, a fairly prosperous condition of things has existed in San Francisco, in connection with the building interests. Although no very large or costly commencements have thus far been made, there has been a gratifying number of moderate-class buildings for business and residence purposes; many more in number during the past three months than have been recorded within a similar period since the commencement of this journal, in 1879. We are pleased to notice that the daily journals of San Francisco have not, during the current year, run into enthusiastic but unsustained statements, crying *boom*, when, in reality, no boom has existed. The interest of San Francisco will be as well or better served and enhanced by unexaggerated statements, than by any system of inflation that can be resorted to; as candid and reliable men are seldom influenced by representations which carry upon their face the impress of improbability or excess. There are, however, quite a number of important building movements nearing commencement, and the prospects indicate a lively building trade during the year. There has already been sufficient work started to engage all the skilled workers in wood, and it has been difficult for some of our prominent contractors to supply themselves with competent workmen. And the supply of certain kinds of building materials has been exceedingly limited, that of lime being subject to orders, with delays in delivery in numerous cases of from five to twenty days. An advance in the price of skilled and unskilled labor has been general in all lines of mechanical operations in connection with house building; and a material advance in the price of plastering-work rules, with no probability of a decline. In fact, present prices for plastering-work should be fully sustained, as during the three or four years preceding 1881 a cruel, unwise, and demoralizing competition prevailed among plasterers in San Francisco, to such an extent that it became difficult for architects or owners to obtain fair work, because, as if by common consent, or from determined purpose to oppress each other, plasterers so thoroughly depressed prices among themselves, that but few did better financially than make both ends meet, while the greater number were unable to pay their bills, and were compelled to liquidate indebtedness by partial or *pro rata* settlement; and many others departed suddenly but quietly, not considering their indebtedness, nor the wishes or claims of their creditors a sufficient bar to their going.

Applying the prices which ruled during the "terrible depression," some owners argue that the "present is an expensive time to build." But this is a mistaken conclusion. Present prices average less in many respects than they were prior to the commencement of the sand-lot era; and with few exceptions, are not in excess of fair and legitimate profits. There is a class of owners of real estate, and people generally, who never willingly pay fair and right value for anything. Avarice and extreme selfishness drive from them all consideration of equities between person and person; and any and all propositions which do not present special advantage to them are rejected; or, if circumstances enforce acceptance, a feeling of dissatisfaction ensues, for no other reason than that the transaction divides the equities, giving to both payee and payor right and proper compensation for money, labor, materials, and things, exchanges "in consideration," etc. But this does not suit some people, and thousands of building lots remain vacant from year to year, because their owners cannot find some one who will improve the same at a cost of ten to forty per cent. less than the improvement is fairly worth.

But there is a great number who neither seek nor desire to avoid the payment of right prices for what they have done, as is shown by our monthly report of building intelligence; which reveals the fact that buildings are being erected in all parts of the city, and largely for "private residences," which strongly indicates permanency of purpose on the part of their owners.

There can be no better evidence of universal prosperity in San Francisco and all parts of the Pacific Coast, than the fact that not only every qualified draughtsman is employed, but the lesser kind are utilized to the extent of their abilities, so that there is no surplus of draughtsmen of any class in San Francisco, while we are in receipt of letters from Los Angeles, Santa Barbara, Oakland, Sacramento; Portland, Walla Walla, etc., requesting us to "send draughtsmen." But we have exhausted the names upon our draughtsmen's registry, and can fill no more orders at present. We mention this simply as a fact, and not for the purpose of causing the immigration of draughtsmen from other places. There has heretofore been a large surplus in this line, and should there be a decline in present activities, the home supply will equal the demand.

San Francisco Chapter of Architects.

The regular monthly meeting of the chapter was held the 2nd inst., President Wright in the chair. The attendance was good, and a lively interest manifested in the business of the chapter.

A deputation from "San Francisco Union No. 22, of the Brotherhood of Carpenters and Joiners of America," was present, and laid before the chapter an address, in which the objects and purposes of the Union were set forth, and asking that the members of the chapter use their influence and professional authority in furthering the objects of the Union. The address was read before the chapter by a member of the delegation, after which it was received by the chapter, and referred to a committee of three, consisting of Messrs. Wolfe, Sanders, and Mitchel.

Mr. Albert Pissis, having been duly proposed at a prior meeting, was elected a member of the chapter.

Propositions for membership were received, and referred to a committee, as provided in the by-laws.

The President, Mr. John Wright, then read an address, containing many suggestions of interest. We publish it in full in this issue.

A special meeting was called for June 9th, for the purpose of considering the constitution and by-laws, as per amendments of the committee.

Superficiality.

It is sometimes amusing to contemplate the frills put on and the self-importance assumed by a class of persons who, having gained a limited amount of knowledge in any special pursuit, *imagine* that they, more than any other within similar range of opportunities, have become proficient in matters which in their very nature and extent defy comprehension and conquest except by long years of diligent application, devotion, and study.

Young men of flighty ambitions, soaring far beyond the limits of natural abilities, more frequently fall into this unfortunate error, accepting the superficial rather than by patient and diligent application aiming and pressing on until the really substantial and practical is secured. This specialty of character is to be found in all trades and professions, with much more of injury than benefit to any. Very frequently, after a short or moderate term of instruction or service as student or apprentice, the taught arrogates a knowledge greater than is accorded to the teacher. Consequently, the world is full of self-conceited, incompetent, and unqualified pretenders in all lines of pursuit, who, to gain even a moderate degree of success, must resort to methods, schemes, tricks, deceptions, and fraudulent devices, to make appear something seemingly meritorious. And this system of misrepresentation and falsification has become monstrous in proportions and magnitude, because the masses *practically* prefer being deceived. Plain, fair, and faithful representations of facts and things are appreciated only by a few, as compared with those who are better pleased when the embellishments of excessive statements and high colorings are added. And this gives vitality and zest to those who make their way through life by resort to deceptive practices; for, as the possession of gold is the main object of life with infinitesimally nearly all mankind, there are but few so conscientiously scrupulous as to reject any proposition around which golden "eagles" hover.

History of the "Lost Arts."

For some time past we have been engaged in the work of collecting information in regard to the "Lost Arts." The result of delving into the secrets of the past will appear shortly in these columns. We would be under obligations to any one who will aid us in this work by forwarding us items in connection with the above subject.