Constitution of the Builders' Association of California.

ARTICLE I.

Section 1. This Association shall be known as The Builders' Association of California.

Sec. 2. Its object shall be to encourage a more intimate acquaintance and cultivate a feeling of friendship among its members; to make them better acquainted with the wants and necessities of the building business; to arbitrate and settle disputes, if any arise among the members, and generally to advance and protect their business interests as contracting builders.

ARTICLE II.

Section 1. Any carpenter residing and doing business as a general contractor and builder in the State of California, and who has announced his willingness to join this Association prior to the adoption of this Constitution, shall be eligible to membership herein without vote, upon the payment of the fee, as provided in this Constitution and the By-Laws.

Sec. 2. Any carpenter residing and doing business as aforesaid may become a member, upon being proposed by two members and receiving the affirmative vote of two-thirds of the members present at a regular meeting, and paying the fee as prescribed in the By-Laws.

ARTICLE III.

Section 1. The regular meetings shall be held at least once a month upon the day and hour fixed in the By Laws and in the City of San Francisco.

Sec. 2. Special meetings may be called by the President (and in his absence by the Vice-President) at his discretion, and shall be called by him at the written request of the Executive Committee or of five other members.

Sec. 3. The President shall state the object of the special meeting in the call therefor, and no business shall be transacted, except such as appertains to the business specified.

Sec. 4. Adjourned meetings may be held at any time by authority of a majority vote of a quorum at a regular meeting, notice being given of such meeting as provided in the By-Laws, stating the business for which the meeting is to be held, and no other business shall be transacted thereat, except such as is stated in the notice.

ARTICLE IV.

Section 1. Nine members shall constitute a quorum for the transaction of business at all meetings.

ARTICLE V.

Section 1. Each individual member shall pay an admission fee of not less than twenty-five dollars, which fee shall accompany the application for membership.

Sec. 2. The dues to be paid by each member shall not be less than one dollar and fifty cents per month, payable in advance.

ARTICLE VI.

Section 1. The elective officers shall be a President, a Vice-President, a Recording Secretary, a Financial Secretary, a Treasurer, and an Executive Committee of seven members.

Sec. 2. The appointed officers shall be such as are prescribed in the By-Laws.

Sec. 3. Four members of the Executive Committee shall at all times be residents of the City and County of San Francisco. Four members of said committee shall constitute a quorum thereof.

Sec. 4. The President shall preside at the meetings, preserve order, see that the rules and laws are enforced, sign all drafts for money voted by the Association, appoint all committees unless otherwise ordered or provided for, and have the care and custody of all bonds which may be required of the other officers.

He shall see that all other officers and committees perform their respective duties, and shall report any neglect or delinquency forthwith to the Association. He shall not speak upon any question except one of order without calling the Vice-President, or in his absence some other member, to the chair.

He shall vote only upon applications for membership or upon questions requiring a two-thirds vote, except to give the casting vote when the members are equally divided. He shall at the commencement of his term appoint a Finance Committee consisting of three members not having charge of the Association Funds, and perform such other and further duties as may be imposed by the By-Laws.

Sec. 5. The Vice-President shall, during the absence or inability of the President to act, perform all the duties of that officer. He shall preside when called upon by the President, and perform such other duties as may be imposed upon him by the laws or rules.

Sec. 6. The Recording Secretary shall keep correct minutes of the proceedings of the Association, file and preserve all papers and documents belonging thereto, conduct the correspondence, draw and attest all drafts for monies voted and perform all other duties usually devolving upon a secretary, or which may hereafter be imposed by law or rule.

Sec. 7. The Financial Secretary shall keep correctly the accounts between the Association and its members and others, in proper books to be provided for that purpose. He shall collect and receipt for all money due from any source, and pay the same to the Treasurer at each meeting, when practicable, but at least once each month, taking his receipt for the same. He shall report at the first stated meeting in each month the amount of all moneys received during the preceding month, and the source from which received, together with the amounts paid out and for what paid. His books and accounts shall be kept in such a manner that the financial condition of the Association and the state of each account can be determined at any time. He shall render the Finance Committee all the facility required in the examination of his accounts, and upon retiring from office, deliver to his successor, or other person designated by the Association, all money, books, papers, or other property belonging thereto.

Sec. 8. The Treasurer shall receive and receipt for all money received by him as such and deposit the same, or all amounts in his hands exceeding fifty dollars, in some bank designated by the Association or the Executive Committee, in his name as Treasurer of the Builders' Association, with the distinct understanding that the said account shall be transferred to his successor in office, upon notice from the Association, through the President and Secretary thereof, stating the person who has been elected to succeed him.

The money, when so deposited, shall be paid out by said bank, only upon drafts or checks signed by the President, attested by the Secretary, and countersigned by the Treasurer.

The Treasurer shall keep a correct account of all moneys received, deposited and paid out, and render a correct report thereof, at the first stated meeting in each month.

Upon retiring from office he shall deliver to his successor or such person as the Association shall designate, all money, books, papers, and property in his hands belonging thereto.

Sec. 9. The Executive Committee shall have and exercise a general supervisory care over the affairs of the Association. They shall designate the bank in which the funds of the Association shall be deposited, unless the same shall have been done by a vote of the Association, and require the officers to change the same, when in their judgment the safety thereof requires it. They shall hear, examine into, and, if possible, settle all disputes between members, when they can do so to the satisfaction of all parties concerned; otherwise report the facts, testimony, and their conclusions thereon, to the Association for their action.

All amendments to the Constitution and By-Laws or Rules, and all agreements to be entered into by and between the members affecting the building business, shall be referred to them to examine and report thereon before action.

ARTICLE VII.

Section 1. The regular elections for officers of the Association shall be held semi-annually at the second meetings in January and July in each year, and they shall be installed at the first regular meetings in February and August following their election.

Sec. 2. The elections shall be by ballot and the majority of all the votes cast shall be necessary to elect, except where there is only one nominee for an office, when the election may be by acclamation.

Sec. 3. The time and manner of making nominations and matters pertaining to the qualifications, etc., of officers may be provided for by the By-Laws.

ARTICLE VIII.

Section 1. The money of the Association shall be kept in one General Fund.

Sec. 2. Rent, salaries, and other necessary current expenses may be paid by a majority vote of a quorum at any regular meeting. But no money shall be otherwise appropriated or paid out in amounts exceeding twenty-five dollars for any one purpose, except by resolution signed and introduced by a member, which shall be laid over at least one week and then passed by a two-thirds vote of the members present.

ARTICLE IX.

Section 1. Any amendments to this Constitution must be proposed by a member at a regular meeting, each section proposed to be amended written out in full as it will read when amended. Such proposition shall then be laid over for two weeks, and when acted on must receive the affirmative vote of two-thirds of the members present, *except* as provided in section 2 of this Article.

Sec. 2. By-Laws not in conflict herewith may be adopted from time to time as the Association shall determine, and may be repealed or amended as provided in said By-Laws. But no By-Laws or Rules shall be passed abridging the right of any member to carry on or transact his business in such manner as he shall deem just and proper, unless such law or rule shall have received the affirmative consent of at least three-fourths of all the members of this Association. Due notice of the passage of any such By-Law or Rule shall be given to each member in writing at least two weeks before the same shall take effect and be in force.

This Section shall not be repealed except by a three-fourths vote of all the members of the Association.

BY-LAWS.

Section 1. The regular business meetings of this Association shall be held on the second and fourth Wednesdays of each month in the City and County of San Francisco, at 8 o'clock P.M.

Sec. 2. Notice of all special or adjourned meetings shall be given either by postal card or by advertisement in two or more daily papers of the City and County of San Francisco. The notice must state the nature of the business to be transacted thereat.

Sec. 3. The fee for admission to membership shall be twenty-five dollars. The dues shall be one dollar and fifty cents per month, payable in advance.

Sec. 4. Any member who shall be in arrears for three months dues shall be notified by the Financial Secretary, and if he fails to pay the same, or such part thereof as shall bring him less than two months in arrears, during the space of two mo ths thereafter, he shall be suspended from the rights and privileges of membership, and so notified.

Sec. 5. Any member guilty of a violation of his agreement entered into and signed by him with the other members, or of a violation of the Constitution, By-Laws or Rules of the Association, first having been duly tried by the Executive Committee (or by a Special Committee duly appointed in case the Executive Committee or any member thereof are disqualified from acting), and duly convicted by their report and a vote of the Association, shall be fined, suspended or expelled, as shall be adjudged by a two-thirds vote of the members present.

Sec. 6. Any member desiring to bring charges against another shall reduce the same to writing, specifying clearly and explicitly the nature of the same, with time, place and circumstance connected therewith and signed by him and delivered to the Association or Executive Committee.

Sec. 7. A copy of the charges shall be immediately served upon the member against whom they are made by the Recording Secretary or some person selected by him or by the Executive Committee, and at least five days' notice given him of the time and place of trial.

Sec. 8. The testimony shall be taken in writing by the committee and signed by the witness. The committee may adjourn from time to time and a quorum may proceed at any meeting.

Sec. 9. When the testimony is all in on both sides they shall consider the same and see if they can settle the matter to the satisfaction of all parties. If they fail to do this they shall report the testimony, together with their conclusions thereon, to the Association for their action and decision.

Sec. 10. The Association shall then proceed to take action thereon and may have the testimony read if desired by either party. During the reading and discussion of the testimony both parties shall be entitled to be present and to be heard. But when the Association proceeds to act thereon all parties interested shall be excluded from the room.

Sec. 11. If the Association finds the accused guilty, it shall forthwith proceed to fix the penalty, first voting upon expulsion. If two-thirds of the members vote in favor of that penalty, the member shall stand expelled. If not, the next vote shall be upon suspension. If two-thirds of the members vote in favor of suspension that shall be the penalty, and the Association shall proceed to fix the time or duration thereof by vote, which time shall not exceed six months. If two-thirds of the members do not vote in favor of suspension, the penalty shall be a fine, and the Association shall then proceed to fix the amount of the fine (unless the same shall have been previously fixed in the By-Laws for like offenses), which may be done by a majority vote, but shall in no case exceed the sum of two hundred dollars.

Sec. 12. The President, in his discretion or when directed by the Association, shall appoint a Sergeant-at-Arms to serve during his pleasure, who shall have charge of the room, furniture, etc. He shall serve papers when required by the Association or by the Executive Committee, assist in preserving order at the meetings, and perform such other duties as may be required of him by the Association or the presiding officer thereof.

Sec. 13. The Finance Committee shall examine and audit all demands against the Association; examine and report upon the books of the officers at the end of each term, and at such other times as the Association may require.

Sec. 14. The President may appoint a special committee of investigation at any time he may deem the same necessary or when required by vote of the Association; said committee shall consist of one or more members who shall examine and report upon the matter referred to them.

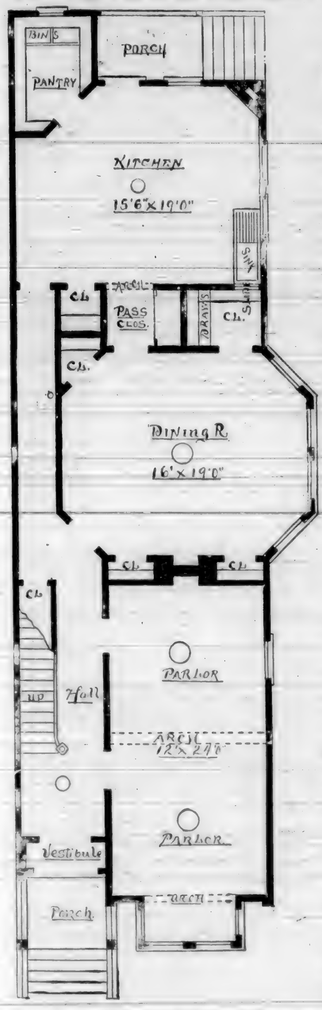
Sec. 15. The Association may at any time require its officers who have the charge or collection of its funds to give bond for the faithful discharge of their duties, which bonds (when required) shall be made payable to the President, in trust for and for the benefit of the Association.

Sec. 16. The Association may employ a clerk to take charge of its rooms, who may also act as Secretary, or it may assign either of its Secretaries to that duty.

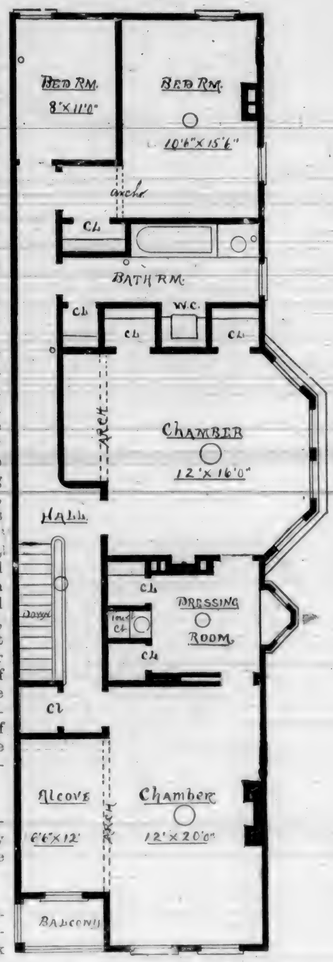
It may pay any of its officers or employes for their services such sums as it may from time to time determine by By-Law or Rule.

Sec. 17. Nominations for officers shall be made at the first regular meetings in January and July of each year, but nominations may be made on the night of election, if the nominees all decline or if ordered by a two-thirds vote of the members present.

Sec. 18. These By-Laws may be repealed or amended in any manner not in conflict with Section 2 of Article VIII of the Constitution, by designating the Section proposed to be repealed or by writing out in full the Section proposed to be amended as it will read when amended, such proposition being signed by the member offering the same, the proposition being first laid over for one meeting and adopted by a two-thirds vote of the members present.



First Floor Plan of $5,500 Dwelling.



Second Floor Plan of $5,500 Dwelling.

Carved Signs.

Carving is practically an art as well as a craft, not merely in interior woodwork but in sign work. Carving well executed in these gives an enriching effect. Soft wood is generally selected for ease of working, this being stained, painted, or gilded. Many fanciful contours are produced, and much taste is frequently displayed in these productions which have laid hold of popular taste. Good carving in the undulations it exhibits will afford not only contrast of form to the general surface but an attractive play of light and shade. The forms at the same time should be well defined, for a mere medley of protuberances and depressions is confusing and unattractive. Right proportion and disposition of parts will impart an aspect of completeness to the design that will not fail to please.

As regards the technique of carving it may be classified in four divisions: 1. The ornamentation of a plane or curved surface with designs in slight relief. 2. The ornamentation of a plane or curved surface in high relief, the *alto relievo* of the Italians. 3. Work entirely curved or wholly in relief. 4. Figures in the round. The first division includes all carving which follows the contour of the sign-board, or forms the contour itself. Undercutting, as a rule, should be sparingly used.

The wood selected for carving, that is to say, the portion to be operated on, should be rubbed over with chalk and the design outlined in strong, dark lines. The depth of the ground of the relief work having been determined, care must be taken that the tools do not cut beneath this. The amount of detachment or absolute relief will depend on the degree of skill required to be exercised in securing due proportions, proper spaces to clusters of ornament if introduced, and the proper degree of prominence and depression to the figure. There must be an observance of right proportions.—*Painters' Magazine.*

It is estimated by a leading Chicago commission house that 8,000,000 cross-ties, mainly cedar, were cut in territory contiguous to the great lakes the past winter.

Owing to the increased growth of the fruit-growing industry on the Pacific Coast, box making in California and Oregon has been very brisk this season.

Valuable Hints.

If varnish or oil does not flow easily, add powdered camphor.

Shellac and borax boiled in water produces a good stain for floors.

Don't inclose the sink—no place in a kitchen is so much neglected.

Porch floors should be of narrow stuff and the joints laid in white lead.

Lime-water is fire-proof protection for shingles or any light wood-work.

Common brick absorb a pint of water each, and make a very damp house.

The lowest-priced builder is not always the cheapest, as poor work will testify.

A closet finished with red cedar shelves and drawers is death to moths and insects.

Do not locate a furnace register next to a mantel, that is, if you wish to utilize the heat.

Terra-cotta flue linings are a great improvement over the old roughly-plastered chimney.

For basement flooring, oak is preferred to maple because it will stand dampness better.

To properly select the colors applicable to the proper place, consult an educated painter.

A ventilating flue from the kitchen into the chimney often does away with atmospheric meals.

Stops to doors and windows should be fastened with round-head screws, so as to be easily moved.

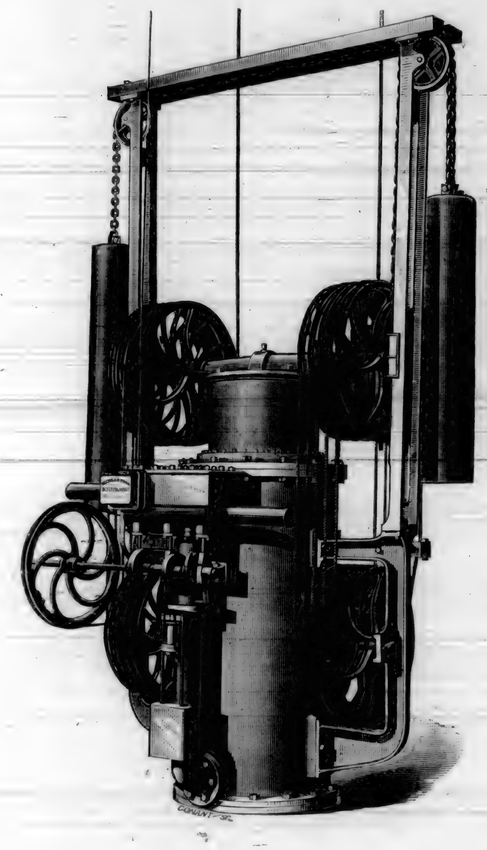
It is better to oil floors than to paint them—a monthly rubbing will make them as good as new.

Do not use one chimney flue for two stove-pipes—the draught of one will counteract that of the other.

Do not finish windows to the floor—the circulation across the floor is one of the causes of cold houses.

Ash-pits in cellars under fire-places and mantels save taking up ashes, for they may be raked down through a hopper.

Do not construct solid doors of two kinds of hard wood—the action of the atmosphere on one or the other will cause the door to warp.



Elevators.

IN considering the many new patents for elevators, and the appliances connected with the same, two essential requisites are necessary. The first one is in regard to the absolute safety of the devices; the second relates to the cost of running expenses. It is a fact that many are more interested in the last proposition than the first, taking it for granted that an elevator is safe as long as it is well built and supplied with any of the modern safety appliances to guard against accidents.

An elevator that thoroughly combines the above two essentials, should receive the consideration of all those who require, either in public, mercantile, or private buildings, an elevator that is simple in all its details, easily understood, and the running expenses of which are considerably less than those of any other machine now in use.

Our attention has recently been called to a new double capacity patent hydraulic elevator, which certainly seems to embody these desired qualities.

The object of this double capacity hydraulic elevator is economy in the use of water. It can be operated by water-pressure from the city main, or from a tank in upper story of building; is always ready for use, night or day, and costs nothing when not in operation. No engineer, steam boiler, or tanks required when city pressure can be obtained.

This machine has one capacity for light loads, and another which, combined with the first, will lift heavier loads. The loads to be lifted may be varied to suit.

A double-capacity hydraulic elevator divides the water into two parts, and uses water in proportion to the loads lifted. Consequently if the lighter load is lifted a less quantity of water is used than though the maximum load is lifted. A single capacity elevator requires as much water to lift the empty car as to lift the maximum load.

In practice it has been found that the loads are constantly varying, and in an ordinary day's use, they will average about one-half the maximum. It is therefore desirable to have an auxiliary power instantly available for any increased load which may be put upon the car, especially if this auxiliary power costs nothing when not in use. The double-capacity machine fills this requisite, and is practically two elevators combined in one, either of which can be used when required. It stops automatically at each end of its stroke, and may be called from one floor to another by pulling the hand-rope at the floor where wanted.

A very important feature, and one not possessed by other machines, is the patent automatic lock or regulator, which avoids a waste of water by preventing the use of the larger capacity when the smaller capacity is competent for the load. Its action is entirely automatic, and dependent upon the load in the car; and it is impossible for a careless or unskilled operator to use more water than is required. The ordinary method of operating double-capacity elevators heretofore has been for the conductor to pull on the valve-rope until, in his judgment, he has opened the valve; but should he pull too far, the full quantity of water, though not needed, is admitted, and the desired economy is not obtained. A double-capacity machine without an automatic lock is little better than a single-capacity machine, and when it is known that elevators are often operated by those who know little or nothing of their construction, and that at each trip there may be a saving or loss of from fifty to seventy-five gallons of water, dependent upon the variation in pulling of the hand-rope, the object of this invention will be apparent.

This machine is guaranteed to be safe, economical, and durable, all parts being strongly and substantially built and made of the best material; when repairs are needed, the arrangement is such that each and every portion is accessible.

The Bancroft History building has been supplied with these elevators, and it is worth the time and attention of those about to build, to thoroughly examine the workings and cost of running these in actual use, before adopting any other style.

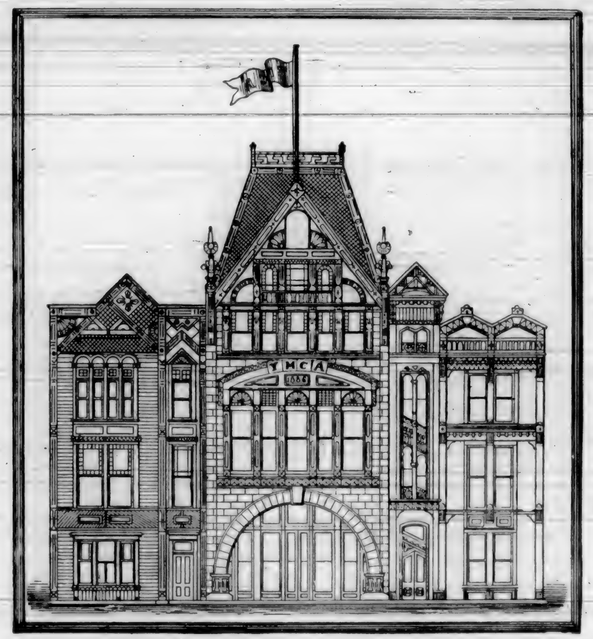
Information in regard to the above will be furnished upon application—either in person or by letter—to the San Francisco Tool Co., corner of First and Stevenson Streets, they being prepared to construct freight or passenger elevators of this style to lift any required load.

In towns and cities having electric plants furnishing light and power the economy of these elevators is still further increased by using pumping apparatus accessory to the elevator, consisting of a tank on top and one at the base of the building, with a pump connecting the two and run by an electric motor actuated by electric power. The pressure and quantity of water are obtained from the upper tank. The elevator discharges into the lower tank, from whence the water is pumped to the upper. The water is thus used over continually without waste.

The San Francisco Tool Co. make such electric motors, under the Keith system, pumps, tanks, etc. The Company is now outfitting the Pacific Power Co., of San Francisco, with a complete large electric plant for distributing power by electricity for elevator and other purposes. It is now running a small plant furnishing power for manufacturing purposes. All interested in this matter are invited to call and inspect the apparatus.

The Y. M. C A. Block.

IN this number of the ARCHITECT we give a cut of the new Young Men's Christian Association building now being erected by Messrs. Gilbert & Sons, contractors and builders, of Woodland, Yolo County. The foundations of the structure, for in reality there are three buildings in one, are laid firmly in brick, each building having its own foundation and own separate studding, so that each structure is independent, although in the block, and can be sold separately or as a whole. The total frontage is 70 feet, depth 108 feet, height to the top of the mansard tower 75 feet 6 inches. The three buildings contain three floors. The one on the right is rented to a doctor for a residence, the first floor of which is arranged especially for Turkish and Russian baths, after the famous Hammam, of San Francisco. This enterprise will give Woodland what few towns of its size East or West can boast of—first-class scientifically arranged and managed steam baths. The building on the left is arranged for a private residence and has been rented to one of Woodland's enterprising merchants. The architecture of the three buildings, as seen in the front elevation, is distinct in each, yet not so striking



THE Y. M. C. A. BLOCK.

as to destroy the effect of a harmonious whole. The building on the right will take after the Eastlake style in finish, the center one, the Young Men's Christian Association building, which projects and is surmounted by the mansard tower, will be finished nicely after the Queen Anne style. The building on the left is rather quaint, being a modification of the Eastlake and suggestive of the Italian. The first floor of the Young Men's Christian Association building will be introduced by a spacious recess under an arch, at the left of which is the ticket office, and directly opposite is the Association bulletin board and directory. From this corridor you enter a private office to the left and the large store in the center, which will be sub-let by the Association. At the right you enter the hall-way leading to the stairs and rooms above, also to the gymnasium in the rear, with its bowling alley, walking track, gallery, tub and shower baths, and with all the improved gymnasium apparatus. It will be one of the finest equipped gymnasiums on the coast. The reading-room and library, the reception parlors and main hall, also the secretary's office, are located on the second floor and are models of convenience, and will be fitted up in a most attractive manner. The third floor is divided up into class-rooms, ladies' central committee kitchen, rooms for boys' branch, and quite a number of lodging-rooms for young men. These apartments will be airy and commodious and will afford the Society delightful quarters. These three buildings are each provided with front and back stairways. They will have all modern improvements and lack no really essential feature to make them complete for their purposes. The probable cost of the block will be $25,000 when finished, and will be a credit to the enterprising builders. The Association is fortunate in getting the second Association building erected on this coast, and no doubt its usefulness will be increased a hundred-fold when it gets into the new building. Surely the business men cannot invest their money in anything where it will do as much good and bring larger returns than in the Young Men's Christian Association.

Sobriety in the Saw-Mill.

A GREAT deal is said about total abstinence in different directions of labor, as to the lack of it, or the necessity for it, and the railroads, especially, have been widely commended for their increasing efforts toward its establishment among their employes, who not only have their own lives in their hands, but those of countless others, as well as the safety of all kinds of property. The importance of a level head, under such circumstances, cannot be overestimated, and it is more or less a requisite in any vocation.

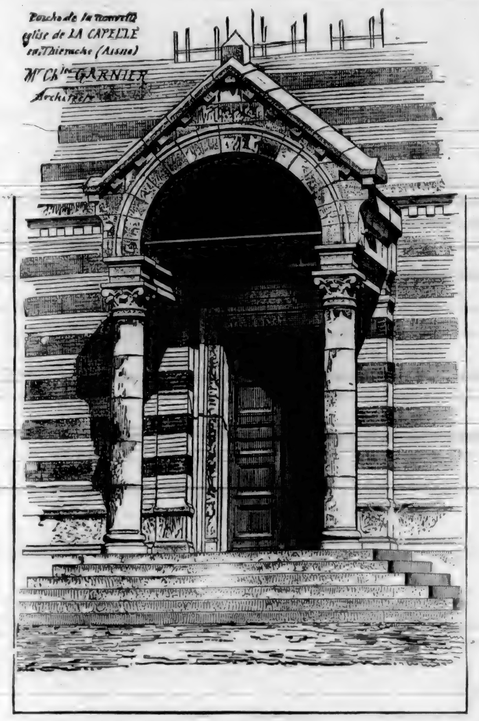
But if there is any place more than another where drunkenness has no business whatever, it is in a saw-mill; and what is more, it is a very notable and undeniable fact that an intoxicated man at work in a saw-mill is a rarity. It is a place where everything goes with precision; where an error may mean limbs or lives, and where bad judgment might in a second wreck a piece of complicated machinery and occasion great damage. With sobriety and the best of care the accidents that occur in saw-mills are of shocking character and alarming frequency. The injury that might be done in a mill or factory of any kind if a man's functions were upset by drink is, of course, apparent, but a saw-mill seems to present the greater details of danger, and to involve unusual exactness. Give a drunken man full swing of the lever, clear the mill of other workmen, and there is no limit to the havoc he would probably create. If the inebriated sawyer did no other damage, what would be the character of the lumber he sawed? If one log looked like three to him, and he could see a double saw, with no ability to tell an inch from a foot, the product he turned out from a log would be a sight to behold.

It would not do to say that an intoxicated man, or one partially under the influence of strong drink, never could or never did run a saw-mill. It would be incredible to suppose there had not been several such cases, but it is the rule that the men who operate saw-mill machinery are sober. Some men have an ability to drink a certain amount of whisky and still control their functions, we reflect, and a man who was a little shot, and a devil-may-care fellow, might pull through a good many tough places.

But the saw-mill owner and the men who labor in it appreciate the situation. They know it means business; they know the danger, and the nicety with which everything must be handled. If they get careless they may pay dearly for it. As a result intemperate men largely keep away from saw-mill labor, either from choice or as a matter of compulsion. It is the exception when it is told that an accident in a saw-mill was caused by intoxication. That the rule of sobriety so generally prevails among saw-mills, while largely a question of direct necessity, is a fact for which lumber manufacturers deserve to be commended, for it takes determination to enforce it, and demands a recognition of merit, which, to a considerable extent, has been granted. The best engineers, filers, and sawyers are men whose industry, exemplary habits, and consequent skill entitle them to good wages, which they receive, and nobody ought to begrudge them what they get.—*Northwestern Lumberman.*

SLIDING-DOORS into small apartments are to be preferred in place of folding.

IN building frame houses, fill the studding one foot high above the sill with brick—this discounts the use of rat-traps.



Recipe for a Cement for Repairing Worn Places in Stone Steps.

LA SEMAINE DES CONSTRUCTEURS, in reply to a correspondent who asked for the recipe of a cement for repairing the worn places in stone steps, gives the composition of the famous "*ciment Sorel*," which has for many years been used by a few contractors, who make a great secret of their process, for filling cavities and restoring abrasions in stone or marble. The first person to use the cement, Sorel, was the inventor of the so-called process of "galvanizing" iron, by covering it with a protecting film of zinc. In the course of his experiments he found that the oxide of zinc, mixed with a solution of the chloride of the same metal, gave a substance which soon became in air as hard as marble; and with slight variations, this mixture is the one employed by all his successors. Sorel, in practice, either used the washed residues from the manufactories of zinc white, which are perhaps heavier and less pure than the white pigment, or heated the ordinary zinc white of commerce to redness to increase its density, upon which the hardness of the cement depends. This, when intended for use, he mixed with a rather concentrated solution of chloride of zinc, having a density of fifty to sixty degrees by Beaume's hydrometer, usually adding about three per cent of borax or sal-ammoniac to lessen the rapidity of setting. So prepared, the "*ciment Sorel*," after setting, soon becomes as hard as marble. It adheres very strongly to stone, and resists heat, cold, moisture, and even the action of acids, and may be colored. To reduce the cost, and assimilate it to stone, powdered granite, marble, or hard limestone may be mixed with it, but soft, earthy substances should not be used. As at present manufactured in Paris, various additions are made to the powdered zinc oxide, to give certain colors or textures, and the chloride solution is sent separately in bottles, the price of the whole, ready for mixing, being about seven cents a pound. The basis of the cement is in all cases the same, some trifling differences in the mode of preparation, such as washing the zinc white with water containing borax before calcining it, or using protochloride of iron, or chlorohydric acid, in the solution, in place of zinc chloride, serving mainly to support the claims of particular manufacturers to a special method of fabrication. In general, the heavier the zinc oxide, and the more concentrated the chloride, the stronger is the cement. To repair stone, either in the shape of statues or steps, the portion to be operated upon should first be scraped to a fresh, clean surface, and then moistened with the liquid chloride. A sufficient quantity of the dry cement is mixed with enough liquid to form a stiff paste, and placed in position, and after being allowed to set a few days, is trimmed off, and smoothed by rubbing with a piece of stone. In summer it will become hard enough to rub down in two days; in winter five or six days are necessary. While setting it must be protected from rain, and two weeks should elapse before a staircase repaired with it is opened to general use. Some of our readers, whose recollections of their experiences in the dentist's chair are fresh, will probably be struck by the similarity of the operations described to those which the dentist goes through in repairing a large cavity with cement filling, and in fact the cement used by dentists is nothing else than the "*ciment Sorel*," prepared with care for their purposes.

Strength the Great Factor.

THE architect or builder who can look back upon a long and honorable career with no element of failure to blot its history can boast of either great prudence and care, or an extreme amount of that commodity called "luck." But few extensive builders have passed through life without recalling some piece of construction where the element of failure was paramount to that of safety. We believe in the truism that it is better to be on the safe side in all our structures. The want of size in timber, the simple absence of a bolt, a few inches in the thickness of a wall, have often brought about elements of danger in buildings that call for the strongest condemnation. There are two reasons for this state of affairs: one is an imperfect knowledge of the strength and capacity of building materials, and the other is a self-confident conviction of a belief born of a hasty and careless consideration of the subject.

The failure of roof trusses, of girders, and joists, the cracking of walls, the settlement of buildings, all may be indirectly traced to the above causes.

In all constructive architecture the first and important factor to be carefully considered is strength. Where doubt exists, well-known authorities should be consulted and living examples examined. The experience of any architect or builder of extended practice is worthy of consideration.

Especially to the young architect and builder is this a serious matter, and although he may, in self-confidence, assume that he has mastered his profession, he will soon learn that after years of practice he has just begun to learn, and it is at this stage he begins to practice carefulness and give some study—perhaps when it is too late—to the factor of safety. Especially is this applicable to the construction of masonry. That great common product of every locality, bricks, used in all our great structures, have in them not only the element of safety, but danger to an extensive degree, if not properly and carefully used.

A brick of medium quality will withstand a great pressure to crush it, if properly laid. From 400 to 1,000 pounds per square inch will crush ordinary brick-work, if laid carelessly. Of course we understand that the figures vary according to the quality of the brick, but the manner of laying has more to do with the safety of brick-work than the strength of the material itself. Not only the manner of laying and bonding, but the mortar goes far to render the work free from failure. The liability to crush and grind, communicated from one brick to another, is much reduced by a bed of good mortar, for the mass, upon becoming compact and homogeneous, is as a solid body upon which movement and crushing effect cannot act; and although the weight of a high wall would seem to bear more upon the bottom courses, yet if we consider the fact that by good mortar and workmanship we cement the work into one common mass, we bring it to the condition of a post or column, bearing the weight of a superstructure equally the same at the bottom as at the top. The fact that much of the brick manufactured by hand in small districts is soft and unburned, renders their use dangerous unless extra care is taken in laying them. Very seldom should brick work be used in isolated or high piers, for the support of great loads; but if used at all, they should be of the best quality, hard-burned, and laid in cement divided by good bond-stone. High piers are liable to buckle or spring out of plumb before crushing, and should in all cases be avoided if we have any regard for the great factor of all good construction—STRENGTH.—*Hill's National Builder.*

IN KANSAS and NEBRASKA, where something neat yet cheap is demanded, whitewood has the call over pine for house finish.

Southern California Sandstone.

A FINE specimen of sandstone from quarries near Los Angeles has been left at the office of this journal, than which in texture and color we have seen nothing finer in this State. The deposit is within a mile or two of Los Angeles City, and the ledge is found in stratas of from six to sixty inches in thickness. Even the heavier stratas are said to be entirely free from seams and fractures, with marked uniformity in color. It appears not to be affected by exposure to the atmosphere, except to improve it in hardness. The proprietors of the quarry propose its introduction for building purposes in San Francisco as soon as transportation facilities are completed.

It is certainly gratifying to notice the unearthing of these natural finer products of our State in building materials. With the sandstone of Santa Clara County, and the more recently discovered Los Angeles stone, an ample supply of beautiful building stone of the kind is at hand, serving all present purposes, with the great probability that other counties of the State will in turn unbosom deposits of sand and other fine stones for building purposes, which will reduce the propensity of a certain class of owners who feel disposed to "send East" for the brown sandstone of Connecticut, to a simple exhibition of folly.

The American Glossary of Architectural Terms.

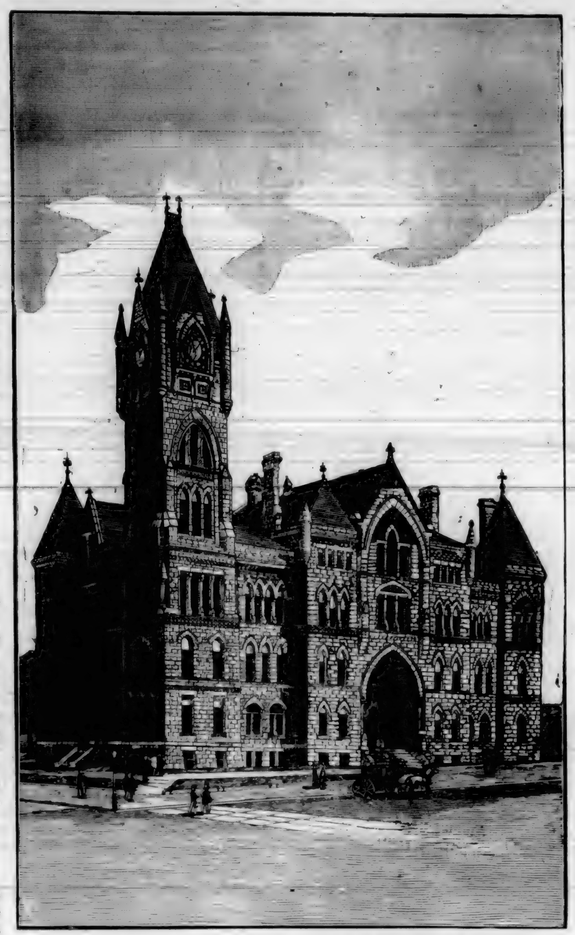
THE object of this new work has been to prepare a concise dictionary of all proper terms used in America and England, but not to treat of words whose etymology is uncertain. It is the only work of the kind ever issued adapted to the wants of the American architect and builder, arranged from a professional and practical standpoint. The illustrations are the most perfect and complete ever presented in any work of a similar standing, and the method used to exemplify on one page the meaning of the terms on the opposite page certainly recommends itself to all. Architectural students of all degrees should order a copy of this work. It is beautifully bound and printed, and will be sent to any address upon receipt of $2.50.

Steam and Water Radiators.

IT will be news to some to know that three-fourths of all the radiators in use in the East are those manufactured by the A. Griffin Iron Co. Not content with supplying over one-half of America, they are making great efforts to secure the entire control of the Pacific Coast, and to this end are shipping weekly car-load lots, so as to fully meet all requirements of the trade. Their very best goods are shipped to this city, and in quantities to suit any demand, no matter how large they may be. C. D. Harvey is the agent on this coast, and may be found at 30 New Montgomery, corner Stevenson Street.

THE curious fact that the usual heat produced by friction is absent when the articles are magnetized, is just now being discussed by scientists who are seeking an explanation. Very striking examples are described in a late number of a scientific periodical. A workman fastened a couple of powerful magnets to his lathe to hold more securely a piece of metal which he wished to drill and turn. The presence of the magnets kept the metal so cold that no water was needed to keep the drill moist and cool. This unusual circumstance may lead to important mechanical advantages. It is such circumstances as the one noted above that lead to valuable discoveries. The scientists, who are looking for a reason why the heat should be absent, may not hit upon any valuable idea, but some practical mechanic probably will.

IN arranging the openings of a room, do not forget the wall space. It is sometimes advisable to build a house to suit the furniture.



DESIGN FOR A PUBLIC BUILDING TO BE BUILT OF STONE.

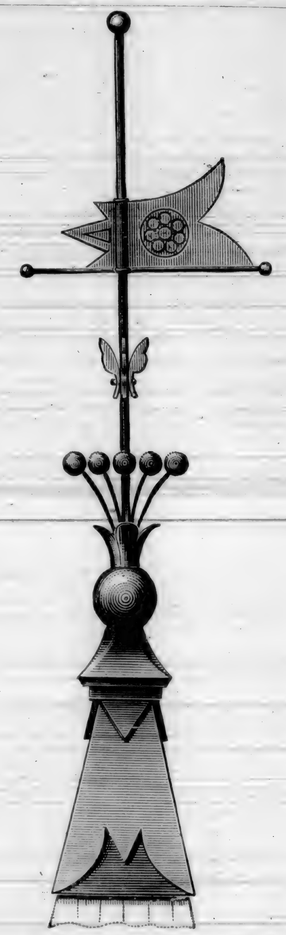
New Inventions and Improvements.

MESSRS. E. C. STEARNS & Co., of Syracuse, N. Y., manufacturers of hardware specialties, ever responding to the demand for labor-saving tools and improvements generally, have recently produced and added to their constantly increasing line, several new articles, three of which are now ready for the trade. These consist of an improved "Silent Saw Vice," entirely new in design; an excellent door clamp, also entirely new in design, being a departure from the old style iron clamp, and a register and ventilator added to "The McGuire Star Thimble."

These three articles are soon to be handsomely illustrated in our columns.

Garland Trap.

WE are pleased to note that the "Garland Trap" is being used in all our *boom* towns and cities. It is superseding, in this city, all other patents, from the fact that its wonderful efficiency as a preventive of sewer gas obtaining access to buildings, has been over and over again thoroughly proven. See that your architect calls for the "Garland Trap."



Finials in Sheet Metal.

THE vagaries in designs with which architects are wont to trim public and private buildings at the present time are almost without parallel. There is no portion of a building perhaps where odd conceits are oftener shown than in the finials surmounting towers. Two pieces of work of this kind are shown in the accompanying engravings. One is a very neat design of a finial carrying a vane, and may be asserted to belong to the conventional order of work of this nature. The other, in addition to the orthodox architectural features of the lower part, has a nondescript beast with wings and forked tongue, hanging to the rock. Whatever may be the designs of finials, the question of the material out of which they are to be constructed is a matter of considerable importance to the builder. Sheet metal work is gradually being recognized as the most appropriate article and there are comparatively few pieces of work of this kind at the present time in which this material does not figure as an important element. The designs here shown are selections from a new catalogue recently issued by Bakewell & Mullins, of Salem, Ohio. The work is a volume of 200 pages and contains a thousand or more engravings representing architectural trimmings of almost every conceivable kind ranging on the one side from ambitious allegorical groups and statuary, heroic size, to leaves, rosettes, scrolls, etc. on the other. While the book is only a trade catalogue and intended primarily for the use of the customers of the establishment named, it is more of interest to architects, builders, and sheet metal workers in general on account of the number of designs it contains, more particularly because it shows work that has actually been executed and in many cases indicates the buildings upon which it has been employed. The work is one which will doubtless have a wide circulation.

New Books.

We have on hand the following books, which will be sent to any address upon receipt of the price.

Essentials of Perspective	$ 1 50
Modern Architectural Designs and Details	10 00
Detail Cottage Architecture	6 00
Leffel's House Plans	3 00
Science of Carpentry	5 00
Mechanic's Geometry	5 00
Artisan	5 00
Artistic Homes	3 50
Mechanical Drawing	1 00
American House Carpenter	5 00
Building Superintendence	3 00
Builder's Companion	1 50
Cutting Tools	1 50
Cottages	1 00
Ornamental Drawing	1 00
Grimshaw on Saws	4 00
Universal Assistant	2 50
Limes, Cements, and Mortars	4 00
Builder's Guide	2 00
Gould's Carpentry	2 50
Trussed Roofs, Ricker	3 00
Amateur Mechanic's Workshop	3 00
Handbook of Legendary Art	3 00
Dwellings, Reed	3 00
Plumbing Appliances	1 50
Modern House Painting	5 00
Stair Building Made Easy	1 00
Cabinet Maker's Companion	1 25
Manual for Furniture Men	1 00
Rural Architecture	1 50
Architecture, Horton	1 50
Wonders of Art	1 25
Common Sense in Church Building	1 00
Old Homes Made New	1 50
Hints on Household Tastes, by Eastlake	3 00
American Cottage Builder	3 50
The Suburban Cottage	1 50
Homes for the People	2 00
Country Homes, Woodward	1 50
Cottage and Farm House, Woodward	$1 50
Suburban Houses, Woodward	1 50
Rural Homes, Wheeler	1 50
Manual of Industrial Drawing for Carpenters	2 00
Illustrated Drawing Book	1 00
Mathematical Drawing Instruments	1 50
Drawing for Carpenters	1 75
Shavings and Saw Dust	1 50
Linear Drawing	1 50
Practical Draughting	1 00
Drawing for Cabinet Makers	1 50
Handrailing and Staircasing	1 50
Painter, Gilder, and Varnisher	1 50
Water Closets	1 00
Sewer Gas	1 25
Steam Engine Catechism	1 00
Paper Hanger's Companion	1 25
Principles of House Drainage	1 00
How To Paint	1 00
Practical Geometry	1 00
Lumberman's Hand Book	2 00
Lien Law	50
Cozy Homes	25
Every Man His Own Mechanic	3 50

COUNTRY
BUILDING INTELLIGENCE

In this and succeeding issues we intend to devote considerable space to information in connection with buildings, from every portion of the coast.

Only reliable news will be found in this column. Our custom has been for the past eight years, to furnish only data which could be relied upon. We will not publish rumors of "THIS AND THAT IS GOING ON" unless we are reasonably assured that such is truly the case. In all cases we will file our authority for any statements made in this column. No doubt mistakes will sometimes occur, but these we intend to be a rare exception to our rule of reliable news.

We desire the co-operation of country editors and mechanics to this department of this journal. By spreading the news of building engagement in your part of the country, you enhance the value of your section by proclaiming it a go-ahead community.

Architects should also notify us of "plans to figure on;" we do not charge anything for the insertion of such notices. Remember this journal is in the EIGHTH YEAR of its existence, and is the only journal published this side of the Rocky Mountains in the interest of Architects, Contractors, and Material Men.

Alameda.

H. K. Starkweather is having built a $2,000 house on Pearl Street.

Science of Carpentry, for $4.00.
Universal Assistant, for $2.50.

Alhambra.

Completion of school-house frame. Architect, B. J. Reeve; cost, $2,000.

Cutting Tools, for $1.50.
Home Hand-Book, for $10.00.

Covina.

M. E. Church, frame. Owner, M. E. Church; architect, Reynolds; contractor, day work. Cost, $7,000.

Cutting Tools, for $1.50.
Cummings' Details, for $5.00.

Coronado Beach.

The foundation for a new house, the property of Architect Falkenar, has been laid.

Grimshaw on Saws, for $4.00.
Mechanics' Geometry, for $4.00.

The laying of the brick foundation for the new building to be erected by the Methodist Society, on the corner of D and Fourth Streets, is commenced. A very handsome three-story brick is projected. The ultimate cost will reach $60,000.

Coronado will have a fine school-house, on a lot 300x500 feet, bounded by E and F Avenues, and Sixth and Seventh Streets, being the second block west of the plaza.

Shavings and Sawdust, for $1.50.
People's Cyclopedia (three large volumes), for $20.00.

Earlham.

A Friends College, to cost $50,000, is projected.

Ruskin's Works (four volumes), for $6.00.
Industrial Drawing for Carpenters, for $2.00.

East Oakland.

Highland Park. Owner, Highland Park College; architect, S. & J. Newsom; contractor, Knowles & Wetmore. Cost, $5,500.

Drawing for Bricklayers, for $1.50.
Drawing for Cabinet Makers, for $1.50.

Garvanzo.

A planing-mill is now erected here.

Woodward's Farm Homes, for $1.00
Woodward's Graperies, for $1.00.

A brick-yard is already at work.

Building Superintendence, for $3.00.
American Cottage Homes, for $3.00.

The town boasts a new telegraph office.

Painter, Gilder, and Varnisher, for $1.50.
Architects' Companion, for $2.50.

A large number of houses are under contract and building in Garvanzo.

Limes, Cements, and Mortars, for $4.00.
Wonders of Art, for $1.25.

Judge Hatch is building a $7,000 house.

Woodward's Farm Homes, for $1.00.
Woodward's Graperies, for $1.00.

A large addition will be built to the Garvanzo Park Hotel.

Building Superintendence, for $3.00.
American Cottage Homes, for $3.00.

Los Angeles.

Three-story and basement brick. Owner, J. Mullally; architect, B. J. Reeve. Cost, $25,000.

Album of Mantels, for $8.00.
Architects' Companion, for $2.50.

Two-story and basement brick. Owner, P. Gaimer, architect, B. J. Reeve. Cost, $11,500.

Manual for Furniture Men, for $1.00.
Common-Sense Church Architecture, for $1.00.

Three-story frame. Owner, Gamable; architect, B. J. Reeve. Cost, $14,000.

Artistic Homes, for $3.50.
Modern House Painting, for $5.00.

Two-story frame residence. Owner, W. S. Hutton; architect, John Hall. Cost, $200.

Pavilion frame, brick. Owner, D. R. Waldon; architect, H. R. Leonard; contractor, R. W. McIntosh. Cost, $3,500.

Every Man His Own Mechanic, for $3.50.
Tredgold's Carpentry, for $7.50.

Three-story and basement brick. Owner, L Phillips; architect, B. J. Reeve. Cost. $500,000.

Architecture and Building, for $3.50.
American Cottage Building, for $3.50.

One-story frame and brick. Owner, Mr. S. Callaghan; architect, John Hall; contractor, J. M. Tibbets. Cost, $500.

Plaster, How to Make It, for $1.00.
Shavings and Sawdust, for $1.50.

Four-story and basement brick. Owner, L. Phillips; architect, B. J. Reeve. Cost, $100,000.

Every Man His Own Mechanic, for $3.50.
Tredgold's Carpentry, for $7.50.

Two-story frame residence. Owner, M. E. Church; architect, Reynolds; contractors, Monroe & Co. Cost, $2,000.

Woodwards' Country Homes, for $1.50.
Practical Perspective, for $5.00.

Four-story and basement brick. Owner, L. Phillips; architect, B. J. Reeve; contractor, Grant. Cost, $160,000.

Woodward's Country Homes, for $1.50.
Science of Carpentry, for $4.00.

One-story frame cottage, brick. Owner, N. J. Rowan; architect, John Hall. Cost, $2,500.

Monrovia.

There are between thirty and forty buildings being erected in Monrovia at the present time.

Lumberman's Hand-Book, for $2.00.
Practical Geometry, for $1.00.

Several more contracts are now being let, some of them for very fine residences.

Steel Square Problems, for $1.00.
Workshop Companion, for 35c.

One-story frame cottage. Owner, Mrs. Hutchinson; architect, E. A. Coxhead; contractor, Leitch. Cost, $2,500.

National City.

Griffith & Heat are building a large brick block on Eighth Avenue. The contract is for $9,000.

Practical Perspective, for $5.00.
Builders' Companion, for $1.50.

L. E. Brown has prepared plans for another $15,000 house.

Ontario.

Two two-story brick blocks. Owner, C. P. Lyndal; architect, Geo. Fyfe; contractor, John Geary. Cost, $3,400.

Two-story brick block. Owner, H. O. Bryan; architect, Geo. Fyfe; contractors, McIntyre & Newman. Cost, $2,900.

Grimshaw on Saws, for $4.00.
Mechanics' Geometry, for $4.00.

Pomona.

The demand for building material is so great that a number of carpenters are compelled to suspend operations, awaiting the arrival of some kinds of lumber.

Hand Railing and Stair Casing, for $1.50.
Drawing for Carpenters, for $1.75.

W. H. Sailor is building a house in the Garthside tract.

Builders' Companion, for $1.50.
Builders' Work, for $5.00.

J. W. Heckman is building for L. W. Carpenter a $1,600 house on Holt Avenue.

American House Carpenter, for $5.00.
Cutting Tools, for $2.00.

Henry Warren is building a $1,500 house on Centre Street.

Plaster, How to Make It, for $1.00.
Shavings and Sawdust, for $1.50.

Completing Catholic Church. Architect, B. J. Reeve; cost, $1,500.

Builders' Work, for $5.00.
Building Superintendence, for $3.00.

Redlands.

Jas. F. Drake is having a two-story house built.

Builders' Companion, for $1.50.
Builders' Work, for $5.00.

Rialto.

W. H. Wickersham, of Los Angeles, has been given the contract for building the large hotel at Rialto. George B. Robinson, from El Paso, Texas, has taken the contract for doing the brick work. Work on the building will begin at once. The house will cost in the neighborhood of $125,000.

Artisan, for $5.00.
Builders' Guide, for $2.00.

Riverside.

H. A. Westbrook is building a residence on Brockton Square. The edifice will cost $10,000.

Lumberman's Hand-Book, for $2.00.
Practical Geometry, for $1.00.

A new chapel is being erected on Sixth Street for the United Brethren.

Science of Carpentry, for $4.00.
Universal Assistant, for $2.50.

T. J. Wood has matured his plans for the erection of a large brick block on Orange Street. It is to be 26x80 feet, two, and perhaps three stories high.

American House Carpenter, $5.00.
Cutting Tools, for $2.00.

Rosecrans.

A large hotel is to be built at once.

San Bernardino.

Architect C. H. Jones has made plans for a one-story building for E. Katz.

Builders' Companion, for $1.50.
Builders' Work, for $5.00.

The corner-stone of the new $20,000 M. E. Church was laid with appropriate exercises.

Album of Mantels, for $8.00.
History of Architecture, for $15.00.

The Anderson building, opposite the St. Charles Hotel, will be the largest in the city. It will cost $52,870.

Builders' Companion, for $1.50.
Builders' Work, for $5.00.

The laundry building for the Southern California Road, at this place, will soon be ready for occupancy.

Ruskin's Works (four volumes), for $6.00.
Industrial Drawing for Carpenters, for $2.00.

One-story brick for Katz, $5,000.

Artistic Homes, for $3.50.
Modern House Painting, for $5.00.

Two-story frame for R. H. Skelly, $2,300.

American Cottage Homes, for $3.00.
Builders' Work, for $5.00.

Two-story frame for J. E. Drake, $2,500.

Album of Mantels, for $8.00.
History of Architecture, for $15.

One-story brick for S. Haile, $6,000.

American House Carpenter, for $5.00.
Cutting Tools, for $2.00.

Two-story office for Russ Lumber Co., $3,000.

Six cottages for S. Weil, $3,000.

San Diego.

An Agricultural Hall is about to be built.

Science of Carpentry, for $4.00.
Universal Assistant, for $2.50.

An opera house to cost $300,000 is to be built in the near future.

Building Superintendence, for $3.00.
American Cottage Homes, for $3.00.

The bricklayers are at work upon the foundation of the new railroad depot at the foot of D Street.

Lumberman's Hand-Book, for $2.00.
Practical Geometry, for $1.00.

The masons have commenced work upon the foundation of the Methodist Church, corner Fourth and D Streets.

Practical Perspective, for $5.00.
Drawing for Carpenters, for $1.75.

Two million dollars' worth of buildings have been lately contracted for, of which half are in the way of construction.

Drawing for Stone Masons, for $1.50.
Building Construction, for $1.25.

Work on the railroad depot at the foot of D Street is being pushed rapidly. A portion of the frame is already in place. The building is to be 40x100 feet.

San Pedro.

Two-story frame. Owner, Mr. Bloomfield; architect, John Hall. Cost, $3,000.

Santa Ana.

Two-story brick. Owner, Dr. Medlock; architect, B. J. Reeve. Cost, $12,000.

Santa Monica.

Episcopal Church, brick. Architect, E. A. Coxhead; contractors, Davidson & Johnston. Cost, $3,000.

San Luis Obispo.

A $200,000 hotel is shortly to be erected, some three miles south of this town, by a company, and ground for the enterprise has already been broken, water pipes are laid, and erection is to be commenced at once.

Mural Painting (new), for $3.00.
Home Hand-Book, for $10.00.

Santa Paula.

Three brick buildings are soon to be erected at Santa Paula, one of which will be occupied by a banking firm.

Album of Mantels, for $8.00.
History of Architecture, for $15.00.

The Alvarado Bridge.

The contract of the county of Alameda with the California Bridge Company to construct an iron bridge at Alvarado, was approved recently by the Board of Supervisors. The contract price is $7,440. The contract for the construction of the new Receiving Hospital was awarded to C. L. Crissman. The contract price is $3,878.

Shavings and Sawdust, for $1.50.
American Cottage Building, for $3.50.

Miscellaneous.

Captain Flavel, of Astoria, will build two fine brick buildings in that city this season. Each will be three stories high; one on the corner of Chenamus and Main, the other on the corner of Chenamus and Cass Streets. The cost of both will be $60,000.

Architecture and Building, $3.50.
American Cottage Building, for $3.50.

A $10,000 flouring mill is to be built in Heppner, Or., this summer.

Woodward's Country Homes, for $1.50.
Plaster, How to Make it, for $1.00.

J. P. Allen will build a large family residence for Will Shoemake, on the northwest corner of Twelfth and K Streets, Modesto. The building will cost, when completed, between $4,000 and $5,000.

American House Carpenter, for $5.00.
Cutting Tools, for $2.00.

Contract has been let for construction of the Despain Block in Pendleton, Or. It will be of brick, and cost nearly $18,000.

Practical Perspective, for $5.00.
Woodward's Country Homes, for $1.50.

Hoffman & Bates, of Portland, Or., have been awarded the contract for building snow-sheds on the Northern Pacific road west of the Cascades, and Hugh Glenn & Co., of The Dalles, for those on the east side. Both contracts will consume about 11,000,000 feet of lumber.

Artisan, for $5.00.
Builders' Guide, for $2.00.

Mr. H. F. Larrabee is drawing plans for a two-story brick hotel, 48x86 feet, to be erected by Mrs. Kornmeyer, on the east side of Railroad Avenue, Oakdale, Cal.

Steel Square Problems, for $1.00.
Workshop Companion, for 35c.

M. J. Mertens has purchased, and will soon erect a fine residence thereon, the lot on the northwest corner of Alameda Avenue and Union Street.

Builders' Companion, for $1.50.
Artistic Homes, for $3.50.

SAN FRANCISCO BUILDING NEWS.

B

Broderick, nr. Fulton. One-story frame.
O.—Mrs M. Clark.
C.—Thos. Elam.
$2,500.

Broderick, nr. Fulton. Alterations.
O.—H. R. Levy.
A.—J. P. Chadwick.
C.—H. Ritchie.
$1,000.

Bryant, bet. Secomd and Third. Three-story frame.
O.—Thos. Green.
A.—W. H. Armitage.
C.—W. E B. Stiles.
$5,500.

Broadway, Buchanan. Three-story. ic frame.
O.—A. adler.
A.—Macy & Jordan.
C.—J. M. Kelly.
$18,000.

Bush, nr. Pierce. Alterations.
O.—S. Nicoll.
$1,500.

Bush and Steiner. Alterations.
O.—Mrs. Goull.
C.—Haner.
$1,800.

Buchanan, cor. Filbert. One-story frame.
O.—L. Zimmerman.
A.—W. Schrof.
C.—T. Merry.
$1,700.

C

Clay, nr. Mason. Additions.
Cost, $600.

California, bet. Kearny and Montgomery Streets. Alterations.
Cost, $1,000.

California, cor. Steiner. Two-story frame.
O.—J. G. Broemmeb.
A.—P. R. Schmidt.
C.—C. hisholm.
$12,000.

California, cor. Baker. Alterations.
O.—P. McGinn.
A.—Mooser.
C.—Hayes.
$2,000.

California, nr. Laguna. Alterations.
O.—O. F. Willey.
A.—J. J. Newsom.
C.—Lynch.
$3,50 .

Chattanooga, nr Church. Four one-story frames.
O.—Comerford.
$6,000.

D

Devisadero, bet. Pine and Bush. Two two-story frames.
O.—Mrs. F. G. Miller.
A.—C. Kenitzer
C.—C. T. Rupple.
$8,000.

Davis, bet. Sacramento and Commercial. Four-story brick and basement.
O.—Mrs. A M. Parrott.
A.—Pississ & Moore.
Mason—Riley & Loane.
Carp.—Langstaff.
$75,000.

E

Eighteenth, cor. Howard; three-story frame.
O.—J. E. A. Helms.
A.—Salfield & Kohlberg.
C.—J. J. Dunn.
$9,000.

Eighteenth, nr. Dimond. One-story frame.
O.—R. McGillan.
A.—J. J. Devlin.
C.—F. A. Williams.
$1,500.

F

Fifth, nr. Bryant. Two-story frame.
O.—Klemm.
$1,500.

Fulton, cor. Baker. One-story frame.
O. and B.—T. H. Day.
$2,000.

Fulton, cor. Baker. One-story frame.
O.—Mr. Doyle.
C.—Houston.
$2,500.

Folsom, nr. Fourth. Additions.
Cost, $500.

Fremont, nr. Market. Four-story brick building.
O.—C. R. Bishop.
A.—W. F. Smith.
Mason—C. B. Merrill.
Carpenter—T. H. Day.
$45,000.

Fourteenth, nr. Howard. Two-story frame.
O.—K. Muller.
A.—Salfield & Kohlberg.
C.—A. Klahn.
$2,800.

Fillmore, nr. Hayes. Additions.
O.—Miss A. Hill.
A.—Townsend & Wyneken.
C.—C. F. Coady.
$2,000.

Fourteenth, nr. Guerrero; three two-story frames.
O.—Con McCarthy.
A.—T. J. Welsh.
C.—P. Maloney.
$10,000.

Franklin, cor. Post. Additions, plumbing and painting.
O.—H. Levy.
$4,250.

C

Greenwich, bet. Mason and Taylor. Three-story frame.
O.—Mrs. O'Connell.
A.—G. E. Voelkel.
C.—G. W. Graham.
$3,500.

Green, bet. Octavia and Laguna. Two-story frame.
O.—J. Jennings.
A.—A. J. Barnett.
C.—T. Sullivan.
$3,500.

Geary, nr. Gough. Two-story frame.
O.—Mrs. A. Taft.
A.—H. Geilfuss.
C.—C. E. Dunshee.
$4,500.

Geary, cor. Webster. Additions.
O.—Mrs. Hydenfelt.
C.—McDougall & Son.
$1,500.

Geary, nr. Webster. Additions.
O.—W. Hunt.
A.—H. D. Mitchell.
C.—G. Pattison.
$2,000.

Green, cor. Octavia. Two-story frame.
O.—Jennings.
A.—A. J. Barnett.
C.—Sullivan.
$3,500.

Green, cor Octavia. One story frame.
O.—Mr. Mahoney.
A.—W. Mooser.
C.—E. Grimm.
$2,000.

Golden Gate, south side, bet. Octavia and Laguna. Two-story frame.
O.—A. Fassman.
C.—A. Norton.
A.—P. R. Schmidt.
$11,800.

Gough, cor. Oak. Five flats, stores and cottages.
O.—Geo. Raphael.
A.—Macy & Jordan.
C.—N. R. Ellis.
$12,000.

Green, cor. Octavia. One-story frame.
O. and B.—M. Webber.
$1,400.

Golden Gate Avenue, cor. Larkin. Alterations.
O.—P. Spreckles.
$800.

Golden Gate Avenue, cor. Franklin. Two three-story frames.
O.—W. Gleason.
A.—J. Bestor.
$6,000.

H

Howard, near Twenty-fourth. Frame building.
O.—M. P. Jennings.
C.—Geo. Houston.
$1,700.

Howard, bet. Tenth and Eleventh. Additions.
O.—Sarah Mier.
C.—P. Farrar.
$2,200.

Howard, nr. Thirteenth. Additions.
$1,500.

Haight, nr. Webster. Two-story frame.
O.—M. Kolning.
A.—John & Zimmerman.
C.—F. W. Kern.
$5,500.

Harrison, cor. Fourth. Additions.
$600.

Haight, nr. Devisadero. Two-story frame.
O.—W. Hayes.
C.—Newbert.
$3,500.

Hollis, nr. Ellis. Alterations.
O.—W. A. Searls.
A.—Townsend & Wyneken.
C.—T. Roth.
$1,000.

Hayes, nr. Scott. Two-story frame.
O.—W. Whitefield.
A.—McDougall & Son.
C.—A. Klahn.
$3,500.

Haight, nr. Webster. Two-story frame.
O.—Friedland.
C.—H. Elmwood.
$3,000.

Haight, bet. Fillmore and Steiner. Two-story frame.
O.—J. P. Devine.
A.—Chas. Geddes.
C.—J. and M. Rountree.
$3,000.

Hayes, nr. Broderick. Two-story frame.
O. and B.—C. Keenan.
$3,000.

Haight, nr. Buchanan. Two-story frame.
O.—Mary Deering.
A.—M. J. Welsh.
C.—R. Sinnott.
$5,000.

Hawthorne, nr. Folsom. Two-story frame.
O.—Kenyon.
C.—Dutton.
$2,500.

Hampshire, nr. Twenty-first. One-story frame.
O.—C. H. Munster.
$1,400.

Howard, nr. Thirteenth. Additions.
$1,500.

Howard, cor. Eighteenth. Two-story frame.
O.—J. Davis.
A.—Copeland & Banks.
C.—Wm. Pluns.
$6,000.

Hermann, cor. Jessie. Two two-story frames.
O.—Mrs. A. Kemme.
A.—T. J. Welsh.
C.—P. J. & M. Brennan
$9,000.

J

Jessie, nr. Second. Three-story brick.
O.—Sharon Estate.
Builder—S. M. Hills.
$8,000.

M

Market, bet. Fifth and Sixth. Additions.
O.—P. F. Butler.
A.—T. J. Welsh.
C.—J. J. Dunn.
$5,500.

Mint Avenue, nr. Fifth. Two-story brick.
O.—J. F. Leve.
C.—R. Ringrose.
$2,000.

Mission, nr. Eighth. Three-story frame.
O.—McGeary.
A.—Townsend & Wyneken.
C.—McGeary.
$8,000.

Mission, nr. Twenty-fifth. Additions.
$700.

Mission, bet. Twenty-fourth and Twenty-fifth. One-story frame.
$600.

McAllister, cor. Steiner. Two-story frame.
O.—A. J. Turner.
A.—H. Geilfuss.
C.—R. P. Hurlburt.
$7,000.

McAllister, cor. Fillmore. Two-story frame.
O.—E. Turner
A.—Balczynski.
C.—R. O. Chandler.
$5,600.

Mission, bet. Twenty-third and Twenty-fourth. Frame building.
O.—J. M. Tully.
A.—M. J. Welsh.
C.—Sticker & Son.
$2,000.

Mission, nr. Twenty-eighth. Two-story frame.
O.—M. Boyd.
Day work.
$900.

N

Noe, cor. Castro. One-story frame.
O.—W. Schroeder.
C.—O. E. White.
$1,900.

O

Oak, nr. Laguna. Two-story frame.
O.—J. Kennedy.
A.—J. Marquis.
C.—Martin & Maguire.
$5,800.

P

Page, nr. Fillmore. Two-story frame.
O.—E. W. Spencer.
A.—G. M. Salsbury.
$3,600.

Post, nr. Broderick. One-story frame.
O.—John Murphy.
B.—P. Lynch
$1,500.

Post, bet. Buchanan and Webster. Two two-story frames.
O.—B. Getz.
A.—J. J. Clark.
C.—C. E. Dushee.
$7,500.

Post, cor. Broderick.
O.—F. Nightingale.
$1,500.

Pine, cor. Baker. Three two-story frames.
O. and B.—G. Hinkle.
$12,000.

Pacific, nr. Leavenworth. Two-story frame.
O.—Wm. Kelm.
A.—Miller & Armitage.
C.—H. Jensen.
$3,000.

Page, cor. Steiner, two-story frame.
O.—Devine.
A.—C. Geddes.
C.—Rountree.
$3,500.

Pine, nr. Broderick. Two-story frame.
O. and B.—D. F. McGraw.
$3,500.

Pine, nr. Broderick. Two-story frame.
O.—H. Welker.
C.—F. A. Steinman.
$3,500.

Pine, corner Baker. Two-story frame.
O.—L. Feder.
A.—McDougall & Son.
C.—Townsend.
$5,000.

Post, nr. Franklin. Alterations.
O.—Mr. Blum.
$1,500.

S

San Jose Avenue, bet. Twenty-third and Twenty-fourth. Two-story frame.
O.—W. J. Tillman.
A.—M. J. Welsh.
C.—J. W. Smith.
$3,500.

Seventeenth, cor. Sanchez; one-story frame.
O. and B.—M. Loftus.
$1,200.

Seventeenth, nr. Noe. One-story frame.
$1,000.

Stevenson, bet. Nineteenth and Twentieth. Additions.
O.—M. and H. Beverson.
C.—J. W. Maher.
$1,300.

Stevenson, bet. First and Second. Four-story brick.
O.—W. Campbell.
A.—Pissis & Moore.
C.—Jas. Geary.
$12,000.

Seventh, nr. Jessie. Two two-story frames.
$3,500.

Sacramento, bet. Polk and Larkin. Two-story frame.
O.—H. Tietjen.
A.—H. Geilfuss.
C.—T. Von Borstel.
$4,500.

Stockton, bet. Broadway and Vallejo. Four-story frame.
O.—A. Aronson.
A.—W. H. Armitage.
Mason.—C. J. Harney.
Carp.—L. Weisman
$11,000.

Stuart, cor. Folsom. Two-story frame.
O.—J. B. Rider.
Day work.
$4,500.

Sacramento, bet. Steiner and Pierce. Alterations.
O.—Schmidt.
A.—Chas. Geddes.
C.—Geo. R. Lang.
$4,500.

T

Turk, bet. Pierce and Scott. Alterations.
O.—L. Turnker.
A.—John & Zimmerman.
C.—B. Knaus.
$4,000.

Twenty-second, nr. Valencia. Two-story frame.
O.—B. Flaherty.
A.—C. J. Devlin.
C.—H. Foote.
$4,500.

Twenty-fourth, nr. Capps; one-story frame.
O.—Mr. Lang.
B.—Comerford.
$2,000.

Twenty-first, nr. Harrison; two one-story frames.
O.—Mr. Watson.
C.—C. O. Smith.
$4,200.

Twenty-first, nr. Folsom. Additions.
$900.

Tenth, nr. Market. Two-story frame.
$900.

Turk, cor. Scott. One-story frame.
O. and B.—T. Rouke.
$1,500.

Turk, cor. Laguna. Two-story frame.
O.—A. M. Silverstein.
A.—H. D. Mitchell.
C.—G. H. Walker.
$4,000.

Turk, bet. Buchanan and Laguna. Two two-story frames.
O.—J. Davis.
A.—Copeland & Banks.
C.—W. Pluns.
$6,500.

Turk, bet. Pierce and Scott. Two-story frame.
O.—Mrs. L. Trunker.
A.—John & Zimmerman.
C.—B. Knaus
$4,000.

U

Union, nr. Laguna. Two one-story frames.
O.—J. W. Cudworth.
A.—G. E. Voelkel.
$4,000.

Union, cor. Buchanan. One-story frame.
O.—J. W. Cottle.
A.—G. E. Voelkel.
Day work.
$2,500.

Union, cor. Polk. Two-story frame.
O.—J. Cantrell.
C.—M. Shay.
$2,600.

Union, cor. Octavia. Frame building.
O.—F. Stempke.
C.—P. T. Fleary.
$900.

V

Vallejo, nr. Stockton. Two-story frame.
O.—J. Dans.
A.—Cappelletti.
C.—F. C. Adams.
$2,500.

Van Ness, cor. Jackson. Two-story frame.
O.—Nolan.
Day work.
$10,000.

Vallejo, nr. Battery. Two-story frame.
O.—Mrs. J. Campbell.
A.—Townsend & Wyneken.
C.—A. McDonald.
$2,000.

W

Washington, cor. Hyde. Six two-story frames.
O.—Captain Burns.
A.—Clinton Day.
C.—G. Lang.
$32,000.

Washington, nr. Devisadero. Two-story frame.
O.—D. M. Richards.
A.—C. I. Havens.
C.—C. Quinn.
$3 800.

Wood, cor. Point Lobos Road. One-story frame.
O.—J. Murphy.
Day work.
$1,800.

Washington, cor. Larkin. One-story frame.
O.—J. F. Stuart.
C.—R. M. Murry.
$3,000.

Y

York, nr. Twentieth. Two story brick.
O. and B.—B. Vincent.
$8,000.

THE CALIFORNIA ARCHITECT AND BUILDING NEWS.

VOLUME VIII. ENTERED AT POST-OFFICE, SAN FRANCISCO, AS SECOND-CLASS MAIL MATTER. ESTABLISHED JANUARY, 1879. NUMBER 9.

THE

California Architect & Building News.

Established January, 1879.

The official organ of the San Francisco Chapter American Institute of Architects. Published by the SAN FRANCISCO ARCHITECTURAL PUBLISHING CO. No. 240 MONTGOMERY STREET, Rooms 11, 12, 13.

Terms per annum - - - - $2.00 in advance.

Published on the 15th of each Month.

When money is sent for subscriptions, the receipt of a copy of this Journal is an acknowledgment that it has been received. Unless requested we do not send receipts.

SAN FRANCISCO, CAL., SEPT. 15, 1887.

Weekly Building Edition

OF THE

California Architect & Building News.

For some time past, we have been making careful arrangements by which we could present to our subscribers a **WEEKLY SUMMARY OF BUILDING ACTIVITIES.** Our plans are almost perfected, and in a short time we will supply, **WEEKLY,** a list of all buildings in progress in the city, and also in every portion of the coast. Various agencies have been established in different parts of the State, through which building news will be sent direct to this office.

In this weekly edition, there will **POSITIVELY BE NO ADVERTISEMENTS INSERTED.** Its columns will be strictly given to the furnishing of city and country building news, and for absolutely no other purpose.

Architects from every portion of the coast can have notices of contemplated building improvements, upon which they desire bids from city contractors, published **FREE** in this Weekly Edition. There also will be no charge for county notices of proposed public improvements. In fact, this **WEEKLY** is intended to cover the whole subject as a reliable gazetteer of public and private building information. Of course it must be expected that it will take a little time to make this weekly perfect in every particular, but it will have the same energy and perseverance to back it up as has been shown in building the "California Architect" from almost nothing to its present high standard.

TERMS.

This **WEEKLY** edition will be furnished **FREE** to all yearly subscribers to the "California Architect and Building News." Material men will at once recognize the great value of a weekly building list that can be relied upon as being as near correct as it is possible to obtain information.

NINE YEARS ago this Journal was started by the present Proprietor, and its appearance to-day, with crowded advertising columns, and entertaining reading matter, is a sufficient endorsement of its merits as the leading Journal of its class on the Pacific slope. Without being egotistical, we can safely say that the circulation of the "California Architect" is larger than that of all the rest of similar journals put together, published this side of the Rocky Mountains.

Remember, this Weekly Edition is furnished free to all subscribers to the "California Architect." We will also give the remaining numbers of this year free to all new subscribers for 1888.

The Boom.

THAT there has been a large amount of booming done in California within the last past few months, is beyond question; and although the fever is not so high now as it has been, it is still sufficiently active for all practical purposes. The larger proportion of the booming has been intrinsically legitimate, while much has been fictitious, strained, and overwrought, to an extent that numerous silly transactions have been consummated by which excited men and women have paid for single building lots, a mile or miles away from business centers, as much, and in cases ten times more, than a whole acre of the same land could have been bought for six months prior.

Every county and section of the State has participated in the boom sentiment, and more or less inflation indulged in, notwithstanding the entire absence of any new development in scores of localities to justify or sustain advance in values over those which have existed, other than the fact that the population of the State is being greatly increased by large immigration, which should have the effect of strengthening and confirming land values, but not of exciting them ten or a hundred-fold, except where the increase of population has concentrated in great force, as at Los Angeles, San Diego, and some other places in the southern counties.

But as matters have gone, owners of land in every county of the State have assumed, whistled their courage up to believe, and have used means and measures as each deemed wisest and best, to persuade others that the only thing necessary to a realization of ten to a thousand per cent advance on moneys invested was to "buy right here."

Transactions stimulated and sustained by solid, intrinsically good and well-assured backings, will in the future compensate fully for all present seeming chances taken, for all signs and facts are pregnant with greatness for the future developments and advancement of the Golden State in all that is calculated to make it one of the very grandest and greatest in the sisterhood of the American Union. But, unfortunately, not all who have plunged into the booming tide have done so wisely or well; and the limit of inflation having been reached, and the shadows of reaction being plainly discernible, and the fact becoming transparent that many of those rampant natures who have been misled by the gaudy butterfly offerings have began to realize that as long as there were simple-minded men and women to buy anything in the shape of lands and lots that were well and sufficiently mapped and boomed, there were individuals and syndicates to bond or buy parcels and tracts, and subdivide the same to suit and accommodate eager buyers at prices yielding to the sellers from one to three hundred per cent profit, and leaving the buyers to wish they had not been so hasty in pur-

chasing, and wondering when or how long ere the amount paid could be again realized.

THE EFFECT UPON BUILDING IN SAN FRANCISCO.

The tens of thousands of building lots, and the miles in acres of agricultural lands sold and purchased, has necessarily diverted many hundreds of thousands of dollars in that channel, which, under the prior usual order of things, would have been spent in building improvements in San Francisco. Hence building operations have considerably quieted down, and much of the drawn-off moneys being tied up in purchases which will not soon advance beyond the prices paid, nor at present return the purchase money, the effect of the boom is likely to be felt for some time to come, except so far as those who have reaped the golden harvest from the lands sold may feel inclined to invest their gains in property improvements.

SOME OF ITS FRUITS.

1. As a consequence of the "Southern California boom," a majority of the horde of impecunious, defaulting, unreliable building contractors, who used to infest this city, have gone to that inviting section, either to ply and repeat their unwise methods, or seek in pastures new to make for themselves an honorable reputation and a fair fortune.

2. Some of our best contractors have also gone South. For these there need be no fear. Judgment and integrity having marked their San Francisco career, it is safe to say that nothing less, with good fortune added, will follow them.

3. The demand for draughtsmen has been such that the draughtsman's bureau of this journal has been overtaxed to supply the demand. Orders are on file for still more draughtsmen.

4. Journeymen carpenters and brick-layers have been, and still are, in demand, both in San Francisco and Southern California, at advanced wages, $3.50 to 4.00 for carpenters, and $6.00 for brick-layers.

The lumber market, and more or less other materials, have been affected by the lively demand in Southern California for building materials. Many classes of lumber in San Francisco are, and have been, scarce, and prices strong. Still, the San Francisco building outlook is beautiful. There is not one drop of discouragement to a whole ocean of fine prospects and promises for the queen city of the Pacific.

California Architecture—Typical Nothingness.

A CORRESPONDENT in the *Carpentry and Building*, styling himself "C. K., Long Beach, Cal.," forwards to the journal referred to the "elevation and ground plan of a typical California house." A more *typical* representation of nothingness was never forwarded to a journal to print, and how it ever came to be inserted in the one mentioned, claiming, as it does, to only insert ideas and illustrations that may be relied upon, is more than we can conceive.

There is not a chimney nor wash-basin shown in the house. Not a single bedroom has a closet connected with it, and the 10x14 kitchen is without a pantry, closet, chimney, or any other convenience. The dining-room as arranged is so deficient in the method of being lighted by windows that on a dark day a lamp would needs be kept lighted continually. The shape of the parlor would disgrace an old backwoods cabin. With the exterior appearance, the less said the better. The rail and balustrade as they appear in the engraving, are simply the design of a school-boy who is hardly old enough to spell the word *proportions*, let alone the ability to interpret the meaning of the word.

There is absolutely no wonder why "C. K." adds to his description, "I have thought that perhaps some of your readers might not only be interested in the plan and view that I send, but that they also may be able to suggest some variations," etc. Truly a nice way to get a plan that is architecturally correct, for the small sum required for a year's subscription.

We are always pleased to see illustrations of architecture on this coast, represented in the Eastern journals. But we must protest against such incongruous specimens as the one referred to as a sample of *typical* California architecture.

Summary for September.

UNTIL the commencement of the real estate boom, building activities were very brisk. The past month has witnessed quite a falling off in the *number* of improvements, although *values* are considerably larger than those of last year. Our record for the month is as follows:—

69 frame buildings, value	$402,850
32 alterations, value	161,100
4 brick buildings, value	44,000
95	$607,950

During the first nine months of 1886 the record shows
947 buildings, value $4,876,922
During the first nine months of 1887, 839 buildings, value 5,211,914
Showing a decrease in *number* of 108, and a gain in *value* of 334,992

Prospects ahead for the winter months are very favorable and much of the disparity shown in *numbers* between the two years quoted will be overcome before our yearly report in December.

Building Activity in Los Angeles.

MANY HOUSES AND BUSINESS BLOCKS IN PROCESS OF ERECTION.

AT the present time there is a remarkable activity going on in building, and especially is this true of the heart of the city.

A glance down the principal thoroughfares discloses the fact that there is scarcely a block between the Plaza and Fifth Street in which one or more buildings are not being erected or additions being built on those already standing. This activity in building will create a great change in the appearance of the city before the winter sets in, for instead of the streets being lined with one and two-story buildings, most of them will have been transformed into four-story houses, and the gaps or vacant lots which have been in existence will be filled up. Thus parties who were here last winter, and who are coming again this fall, will hardly recognize the city as the same that they left less than a year ago. With all the activity in building there is a demand for rooms which cannot be supplied, and unless the completion of the buildings in course of erection is hastened, the rush is likely to find the city unprepared. On every side the brick buildings are in such a stage of erection that it will not be possible to have them ready for occupancy before November or December, and at that time the rush will be here. One cause for the delay is said to be the scarcity of brick. One building has been delayed considerably by the scarcity of pressed brick, and no doubt others are in the same category. Outside of this class of buildings there are a large number of houses in course of erection further out, but at the present time there are at least ten people looking for houses where one is to be found. There are families waiting to come to Los Angeles, but they cannot come because they cannot rent houses. In San Francisco, and in other cities, there are enterprising men who erect houses especially for rent, and in those cities there is not as much demand as here. It seems strange that something of the kind has not been done here. A close search in Los Angeles has failed to reveal the existence of a single house composed of flats, and in what other city of a like population is this the case? It is true that until recently there has been no necessity for apartment houses or flats, but at the present time fully two hundred would be rented before completed, especially if erected near to the heart of the city.—*Herald.*

MR. C. MERCHANT, of Merchant & Co., Philadelphia, U. S. agents and manufacturers of the celebrated "GILBERTSON'S OLD METHOD," and "CAMARET" brands of tin-dipped roofing plates, has just returned from England, where he accomplished two important things in connection with the business of roofing plates. As is generally known, this firm was the first to bring out guaranteed roofing plates, which had before been unknown in this country, their guaranty covering all the different points which enter into the value of roofing plate, thickness, coating, weight, squareness, etc. In order to prevent the use of inferior materials where requisition had been made for their brands, they were obliged to adopt the plan of stamping the sheets with the brand and thickness. Others followed by stamping the brand, but not the thickness, thus making it possible to use thinner and cheaper plates instead of the ones specified. This action on the part of unreliable firms has led Merchant & Co. to take another important step, that of stamping each box with its weight. There are two sizes and two thicknesses of every brand of roofing plate, and the importance of using every precaution to insure the use of just what is specified is therefore evident. Another important step in this connection is an arrangement which Merchant & Co. have made with the makers of the two brands which they represent, that the "seconds" or imperfect sheets (which come out with the majority of brands) shall not be sent to the United States nor sold to anyone in England. There will be, therefore, only one kind of goods sold, and the quality of goods bearing these brands is then positively insured.

ELEVATION, PLAN, DETAILS, AND SPECIFICATIONS OF AN "ALAMEDA" COUNTRY HOME.

CALIFORNIA can justly boast of a larger number of pretty places and picturesque localities in which to erect residences of moderate cost, than can be found in any other State in the Union. The beautiful town of Alameda, covering, as it does, a large extent of ground, embracing several square miles, may be regarded as a paradise for those who wish a quiet retreat, away from the din and confusion of the city, and yet be in close connection with the great mart. Nearly every portion of the town is covered with a natural growth of oak trees. Nor does this growth stop at this point; for a long distance to the north the ground is covered by the beautiful trees from which the neighboring city of Oakland derives its name.

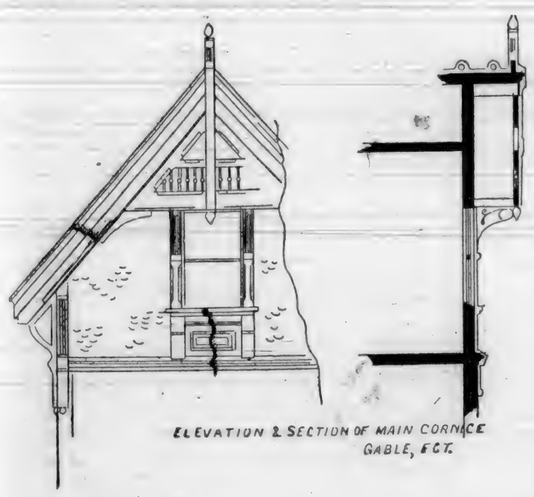
PERSPECTIVE VIEW OF $2,500 ALAMEDA COUNTRY HOME.

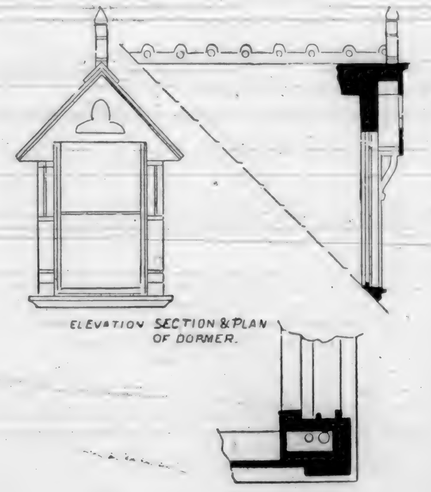
Extremes meet in architecture as well as other matters. Some esthetic persons have sought to copy the humble abode of the laborer in the external view of a dwelling, while the internal arrangements and fittings rival those of Aladdin's palace. Others seek to have the outside present to the eye a conglomeration of whimsical ideas, while they have not deigned to cover the floors with a carpet, nor have a door between any of the rooms or halls, excepting those connecting with the outer world.

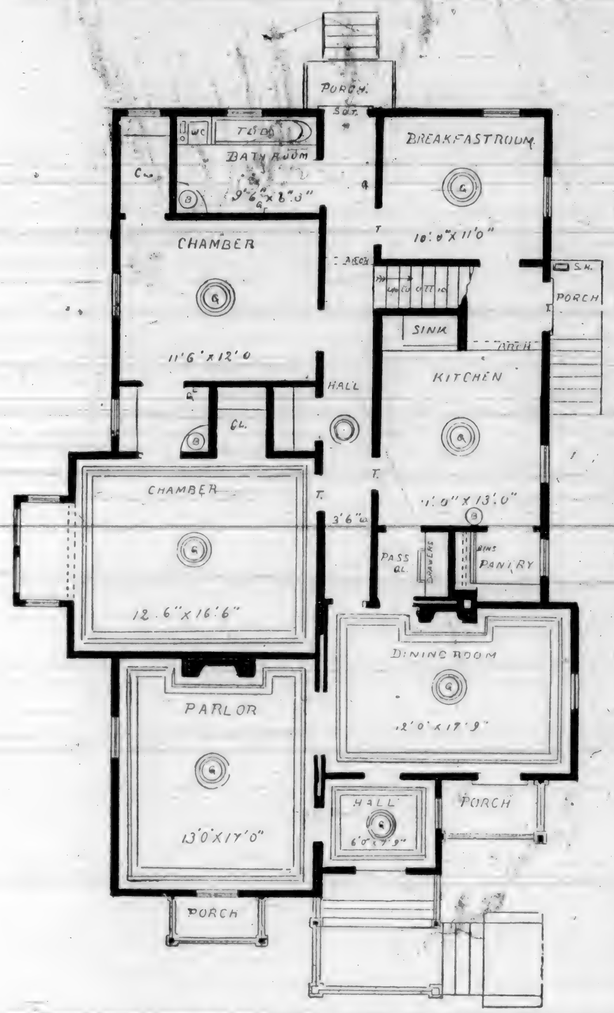
Much benefit has been derived from these whimsical erections, and it is only by much study and close application to the fancies of their clients, that architects have been enabled to prepare the beautiful Bijou plans, a good representation of which is given in this issue. In justice to the architectural profession, we must say that no portion of their practice has been so usefully bestowed as that which has been bestowed upon the production of plans for such homes, a full plan of which accompanies this article.

The elevation, as shown, is a model of neatness and economy. At once attractive in appearance and substantial in all its surroundings, it does away with all those horrible idiosyncrasies and bugbears of the Elizabethan and Queen Anne styles. There are no small windows to cause the one who cleans them to utter a whole vocabulary of cuss words at the architect who made so many corners to dig out. There is no part of California but what needs all the sunshine that was intended to enter a room, and the large windows shown allow the heat and light to make glad the hearts of the dwellers therein. Even with the thermometer at 100 degrees and over in the shade at noontime, still when evening comes, the cool winds that invariably bless the sleep of those who are tired from their daily toil, has easy ingress from these same large windows. And in winter, from the absence of snow in all of our beautiful valleys, the same windows are a source of joy and comfort for the occupants to observe the driving rains, or admit the blessed sunshine as it pierces through the wintry clouds.

Great care should be exercised in painting the exterior. The colors selected should be a happy blending of light and dark shades. They should be graded from rich, heavy grades at the bottom, to the lighter tones of the gable peaks, preserving, through the intermediate section, a consistent harmony. The roof may be of dark slate color. The trimmings may be colored with a combination of blue, black, and Indian red. The body of the house may be varied to suit the above. It must be distinctly







Plan of $2,500 Alameda Country Home.

borne in mind that all buildings of the same class cannot be treated alike. Trees have a wonderful effect on colors used, and the main study of the painter and owner should be that the salient points of form and detail be enhanced by the proper selection of the various colors. By all means, if you are building a home for yourself, take the good wife into your confidence, and let her judgment be given on the various colors to be used.

The arrangement of the rooms, as shown by the plan, is very desirable for anyone with a small family. A feature is made of the entrance-way. From the hall, one can pass either to the parlor or dining-room, the latter being the general sitting-room. The parlor is large, 13x17 feet in size. It has a fire-place as shown; a cornice is also designated. Sliding doors connect this room with the dining-room, the size of the latter being 12x17¾ feet. A cornice and fire-place are also shown. In case of company or family gathering, the two rooms will be practically one. The porch shown in front will be very handy for the gentlemen who smoke, or, on warm days, the ladies can use the same for sewing purposes, sheltered, as the plans show, by the roof overhead.

You pass from this room into a hall, from which you can enter all the rest of the rooms. The main chamber is 12 feet 6 inches by 16 feet 6 inches, besides a large bay-window, having four windows for light and air. There is also a cornice in this room, and a place for a stove to connect with parlor chimney. There is a very large closet, and also wash-room, which is well-lighted and ventilated. Passing along the hall, we next come to a large linen closet. This will be found very serviceable for the storage of the linen in daily use.

Then comes a large chamber, 11 feet 6 inches by 12 feet. No cornice is shown. Should a fire be needed in this room, a patent flue could be placed therein, starting from near the ceiling. A large closet is also connected with this room. At the end of the hall is the bath-room, 6 feet 3 inches by 9 feet 6 inches. A wash-bowl and water-closet are shown. The window, being directly over the tub, assures perfect ventilation.

On opposite side of hall from bath-room is a room designated as breakfast-room, in size 10x11 feet, with two windows. This can be used as a bedroom, should the dining-room suffice for the needs of the occupants of the house. This room is very convenient, as it can be reached by three different ways. The next room is the kitchen, in size 10x13 feet, with plenty of light and ample means of ventilation. The place for the stove-pipe is indicated by the dotted lines leading to the dining-room chimney. Should it be found more desirable to have the stove in a different position from that indicated, a patent flue can be put in, starting near the ceiling. A large pass-closet, amply fitted with drawers and shelves, connects with the dining-room. There is also a large pantry fitted up with bins, etc.

A stairway is shown, near breakfast-room, leading to the attic. No plan is given of the latter, as the space can be divided according to the individual tastes of the parties building. The rear hall is 3 feet 6 inches wide.

The whole plan is very compact, and will bear careful study. The detail drawings as shown will give an adequate idea of the various finishes. Each one is distinctly marked.

We append a general set of specifications to aid those who may see fit to adopt the design. Should anyone want a complete set, we can forward them a printed copy.

SPECIFICATIONS.

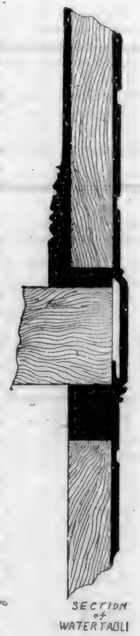
Excavations.—All rock, dirt, etc, to be cleared away from site of the building; trenches for walls and piers to be extended down to firm and solid ground; the bank to be dug well away from the walls, and the same to be left open until the walls are well set and dry.

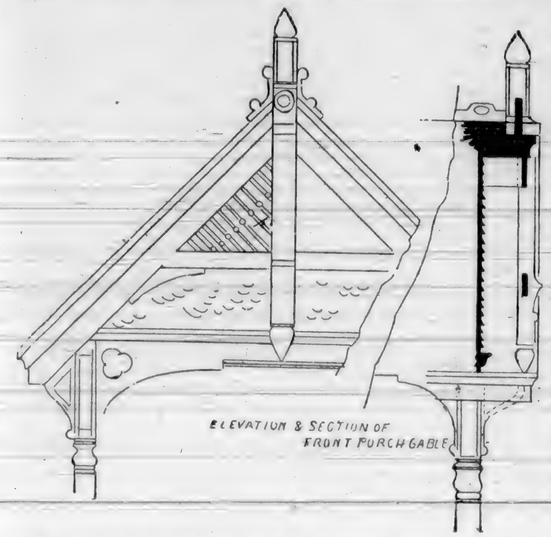
Drains.—To be of iron-stone pipe, with cemented joints. The fall to be not less than one-fourth inch to one foot; no drains to be less than sixteen inches from surface of ground.

Brick Work.—Hard, well-burned brick to be used throughout. All brick walls to be made level and straight to the proper and exact height, and to a true line from one end to the other, even to the splitting of a brick where necessary. Piers 12x12 inches. Turn trimmer arches for the support of all hearths at the time chimneys are built. All sills to be set in mortar after walls are proper height.

Size of Timbers, etc.—Main sills, 6x8 inches; plates, 2x4; studs, 2x4; underpinning, 4x6; joists, 2x10; ceiling joists, 2x4; rafters, 2x4; bridging, 2x3 and 2x4. Studs and joists spaced 16 inches from center; rafters, 2 feet 8 inches from center; underpinning, 2 feet 8 inches from center. All timber below main sills to be of redwood.

Roof to be sheathed with 1x6 Oregon pine, well nailed to every rafter. Gutters arranged so as to carry off water wherever directed.





Rustic.—All laps and butt joints, to be painted before being nailed in position. Butt joints to have a 3x11-inch piece of tin to keep out water.

Outside Steps to be built upon strong stringers, inch risers of redwood, and two-inch treads of Oregon pine, with nosing and scotia. The recess to front hall will be floored six inches below main floor, with three-inch Oregon pine, put together with white lead.

Floors.—Oregon pine, tongued and grooved, 4 inches wide, to be used throughout the house. One tongue nail and one through nail to be driven in each piece at each nailing.

Grounds to be of ⅞-inch Oregon pine to all openings.

☞ *No inside finish to be put on until the last coat of plastering is on.*

Face casings to be 6 inches wide and 1¼ inches thick, with suitable plinths.

Sash beads to be fastened on with raised-head screws.

All interior work to be hand smoothed and sand-papered.

All carved or planted-on work to be primed before putting up.

Base in all rooms to be 10 inches wide with 2-inch moulding.

Wainscoting.—Rear hall, kitchen, and breakfast-room to be wainscoted 3 feet high, and capped with nosing and scotia. Bath-room, 6 feet high all around.

Pantry and Pass Closet to be fitted up with shelves and hooks complete, and bins and drawers as shown.

Lathing.—Good sound lath to be used, laid on not less than ⅜ of an inch apart. Joints broken over 8 laths. No lath to be put on vertically, to finish out to corners or angles; neither must there be any lath run through angles and behind studding from one room to another. All angles to be formed and nailed solid by carpenter before laths are put on.

Plastering.—All walls, partitions, and ceilings to be plastered one coat of well-haired mortar, made of best lime and clean, sharp sand, free from loam and salt, using best cattle hair. To be made at least eight days before using.

Brown coat to be covered with a good coat of best white hard finish. All plastering to extend to the floor. Center-pieces where designated on plans.

Painting.—All interior woodwork to have three coats of best white lead, in such tints as may be approved by the owner. Kitchen floor to be oiled two coats.

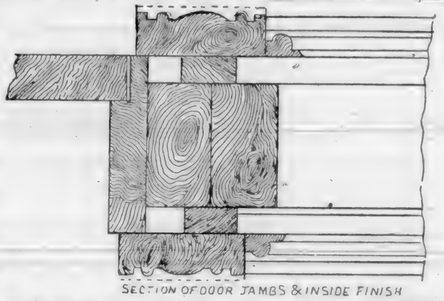
Gas Pipes to be introduced so as to give the number of lights shown on plan.

Plumbing.—Water-pipes to be of galvanized iron ¾ inch in diameter. No ½-inch pipe to be used. A 40-gallon galvanized iron boiler, with necessary connections, to be placed in the kitchen. Sink to be of size shown by drawing, to have 2-inch iron water-pipe and a Garland trap; 3½-inch brass strainer; back of sink to be lined with zinc. Slop-hoppers to be placed as shown. Wash-basins to be located as per plan, and to have all necessary hot and cold water connections. Water from all basins to discharge into an open slop-hopper outside. Bath-tub to be lined with No. 12 zinc, to have a 1¼-inch waste, with Garland trap. All necessary fixtures for bath-tub to be placed in proper position. The water-closet to be Budde's patent. Place safe trays under all sinks, bath-tub, wash-basins, water-closets, etc, with 2-inch turned-up edges, well nailed to woodwork. Three-fourths inch wastes. All waste or soil pipes to be connected with the sewer, and extend the same above basins, sinks, bath-tub, water-closets, etc., out through the roof.

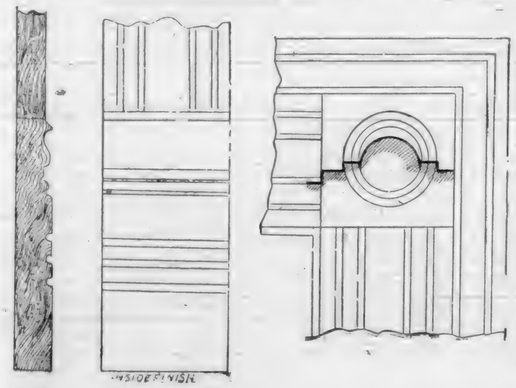
Generally.—Drawings and specifications are intended to correspond, and to be illustrative the one of the other All drawings to be furnished by the architect, details to be given from time to time as the work progresses. Should the necessity arise that any change or changes be made from the original design, the owner shall have the right so to do without invalidating the contract, adding to or deducting from the contract price the agreed sum of any change made.

COST.

The above specifications are given as a general index

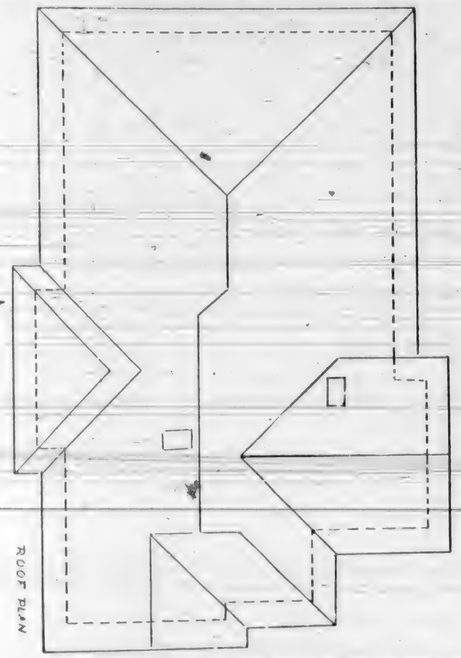


of the work. No accurate estimate can be given from them of the cost of the house. Quality and price of hardware, etc., have been omitted, leaving same to the pocket-books of intending builders. As shown, with finishes indicated by the details given, the house can be erected at a cost of about $2,500. Of course this figure can be changed considerable. Using best of materials, etc., the price should be given at $3,000, at which sum a truly cozy home can be obtained by those seeking a permanent dwelling-place.



Outside Painting.

Architecture having inclined to a greater degree of decoration, mainly owing to the development of the renaissance style, which aims at picturesqueness, affords far more opportunities than formerly for attractive and varied color effects. No reason convincing to ourselves has yet been advanced why bright and even gay colors should not be more extensively used in the outside painting of houses, care being taken that the application shall be judicious. They would particularly serve to emphasize what we may term the ornamentally constructive portions, which need to be specially brought out. A very



Roof Plan of Alameda Country Home.

little bright color, such as a band of red on olive, will often have a brilliant effect. In an instance which we have in view—a country house—the body of the house is in pea-green, and the olive and red are applied to the cornice and window frames. these colors also appearing in the stoop and piazza. We have seen a business building painted blue, whilst the cornice was of yellow, and the effect was excellent; for a building is not to be considered in the light of a design painted on a wall, or ceiling, or on canvas. It is sufficient that good contrasts are presented, instead of possessing a monotonous appearance. The architect aims at varied combinations of forms, including projections and recesses, and it is for the painter and decorator to give these their best effect in color. We are not recommending mere meretricious gaudiness, than which it is better that a whole house should be painted, exteriorly, one uniform, subdued hue. Too strong a protrusion of color is always a viclation of all the rules of harmony and contrast. A house, according to its style and situation, allows of a treatment in colors that in another case it would be manifestly unwise to follow. Let a house be surrounded by umbrageous trees, and red will establish a fine contrast, looking particularly well should the structure be furnished with a tower. There are many country residences in which positive colors have been employed with excellent results; but there remain many more which admit of great improvement by more variety in the way of coloring.—*Painters' Magazine.*

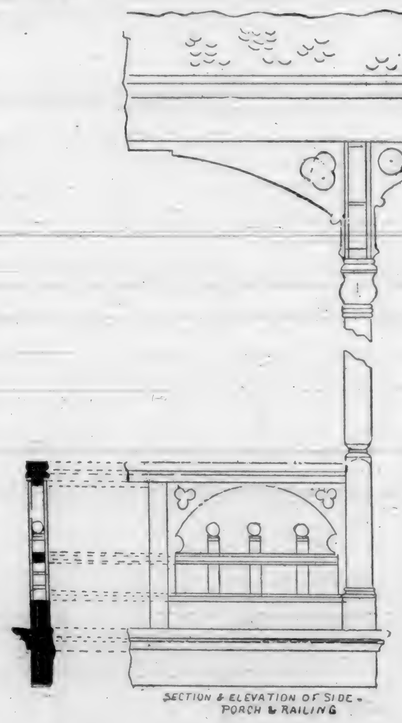
Make two rooms in a house as nearly as possible of the same size and form, for the convenience of turning carpets, and also so as not to require a waste of lumber.

What Is an "Architect"?

Is the question asked by the *Record and Guide.* As they state, in the present condition of affairs, "anyone possessing the knowledge of a poor carpenter, the skill of an indifferent draughtsman, a little audacity, and a ten-dollar bill, can appoint himself an architect, and, alluring the public by cheap rates, fill our streets with buildings that are both dangerous and hideous." It is for this reason that we have advocated the licensing of architects. If it is impossible to achieve this result, real estate papers can help to some extent by urging upon their subscribers the enhanced value of buildings designed by architects of reputation in matters of design, construction, and sanitation, and that the fact of a building being constructed under the direction of a reputable architect is, in so far, a guarantee of its being well built.

In regard to the nominal compensation allowed to the "grinders out of plans by the yard," it should be considered by builders, as well as by owners, a suspicious circumstance to find anyone ready to accept a fee less than that prescribed by the American Institute of Architects. We have frequently called attention to the fact that where a so-called architect accepts a nominal sum for superintendence the full commissions are more than made up by taxes on the contractors and sub-contractors, which money eventually comes out of the owner's pocket. Our definition of an architect would be one who has studied the profession of architecture from youth, who has spent not less than five years in the office of a recognized member of the profession, both working at the boards and as superintendent of construction, and one who occupies a portion of his time throughout his life in studying the progress of his profession. A man who says he has no time to read architectural works, or to attend conventions, must be behind the times and only fit for the second rank.

Constant study is as necessary for an architect as for the members of other professions, and one would hardly be likely to intrust his health to the care of a physician who knew nothing of the discoveries constantly occurring in the medical world. With the facilities now afforded to youth, it would be perfectly fair to expect the coming generation of architects to be graduates of architectural departments of colleges, and then to hold certificates of study for a term of years in the office of an architect belonging to some generally recognized architectural associat on. —*Building.*



DESCRIPTION OF THE NEW BROOKLYN PRESBYTERIAN CHURCH.

We invite the attention of our readers to the engravings of the plans and elevation of our new and beautiful house of worship, now being erected on the corner of Twelfth Avenue and Fifteenth Street, East Oakland. The building occupies a lot having a frontage of 140 feet on the street and 150 feet on the avenue. The dimensions of the building are 70x143 feet. There is about six feet of yard upon the street frontage, and 25 feet upon the avenue frontage. As the lot is two feet above the walk, this space can easily be made most charmingly beautiful. Upon the western side of the church there is a vacant portion of the lot with a frontage of 45 feet on the street, and 150 feet in depth. Upon the rear portion of this space there will be erected sheds for horses and carriages, while the front portion will be appropriated to drive-ways, walks, and lawn. The auditorium fronts upon the street, from which is its main entrance. The rear portion of the building is for Sunday-school and social meetings, with an entrance from the avenue, and also upon the opposite side of the building from the vacant lot.

Brooklyn Presbyterian Church, Twelfth Avenue and Fifteenth Street, East Oakland, Cal.

(see plans on next two pages.)

The dimensions of the several parts of the building are given upon the engravings of the plans. The roof of the auditorium is supported by strong trusses, the heavy, varnished timbers of which are exposed to view from within the room. Several feet above these timbers is a plastered, dome-shaped ceiling, formed into panels about four feet square by varnished beams and cross timbers. The ceiling in the lowest place is about thirty feet from the floor, and at the highest point about fifty feet. There are four stained-glass windows near the top of the dome, and three large windows in the front and two sides of the auditorium. These three windows will b made very beautiful and consecrated to the memory of three former pastors,—Pierson, the first pastor, Dean and Patterson, both passed to their reward.

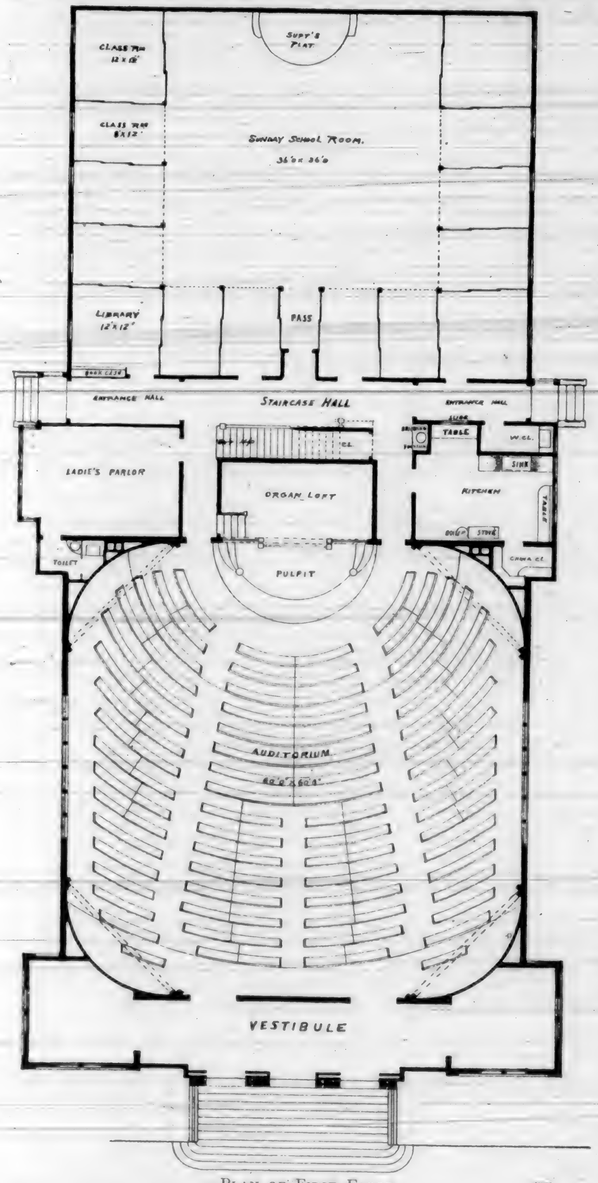
The auditorium is estimated to seat from five to six hundred, without the gallery, which will be added when required. The floor is well inclined, and the seats will be arranged in a semi-circular form. In addition to the main entrance, there are two other entrances, one upon either side of the organ loft, and leading from the main hall of the Sunday-school department. These, being upon the level of the lowest portion of the auditorium floor, will be convenient for those who wish to avoid ascending steps. They will also connect the auditorium with the other portions of the church, and afford facilities for rapid egress.

The Sunday-school portion of the church is constructed upon a unique but very simple plan, with a view to securing, as fully as possible, the massing of all the scholars into one assembly for general exercises, and their separation into rooms for class recitations. To accomplish this there are employed sliding doors and "slat partitions." This portion of the church is 48x60 feet, with a gallery 12 feet deep upon three sides. Beneath this gallery there are triple sliding doors, coming out from the outer walls to the pillars supporting the gallery. These doors, when drawn back to the wall, are entirely out of the way, and do not interfere with the oneness of the room or school, and when drawn out to the pillars, they form, under the gallery, four rooms 12 feet square, and ten alcoves 8 feet wide and 12 feet deep. These alcoves are then shut off from the main room and converted into class-rooms by means of "slat partitions," drawn down from the ceiling, which is under the gallery, and between the pillars supporting the gallery.

These "slat partitions" are made of white ash slats eight feet in length, three-fourths of an inch thick, and one and one-fourth inches wide. These slats are formed to slightly overlap each other, and are fastened closely together by means of a thin but strong brass ribbon, and all glued firmly to heavy canvas. They thus form a strong curtain, which can be folded or rolled at pleasure. The ends of these slats run in grooves in the pillars

and they are drawn up into the ceiling by weights, which are suspended in the outer walls. When thus drawn up, these partitions lie horizontally between the gallery floor and and the ceiling below.

Thus, upon three sides of this main room, and beneath the gallery, there are formed fourteen nice class-rooms, which as speedily all dissolve into one general room. The front of the rooms, and can be separated into rooms for classes, if desired, by means of cloth curtains. When the "slat partitions" are all up, and the sliding doors are all drawn back to the wall, there is nothing to obstruct the view in any part of the room or gallery, save the small pillars five inches in diameter. There are then five doors from the entrance hall into the main room, and two from the hall above into the gallery. The sliding doors are shown upon the plan; the "slat partitions" are indicated by dotted lines between the pillars.



Plan of First Floor.

It will be seen that the primary department is so far removed from the other portions of the school that the exercises of one will not disturb the other, and yet the little ones, by taking seats in the gallery, can participate in the general exercises of the school if desired.

Including the pastor's study and the ladies' parlor, there are twenty class-rooms for the Sunday-school, besides the gallery. In several of these rooms there are electric bells, connected by wire with the Superintendent's desk, by means of which the order of exercises is readily communicated to all the school.

The kitchen is located near the main room, with sink, and tables, and china closets, and a "pass window" which opens into the main hall. This will be found very convenient for socials and other kindred gatherings of the church.

By observing the plan it will be seen how fully all the room has been utilized, and how numerous and wisely distributed are toilet and other rooms and closets. The entire cost of the building will not exceed $25,000, at which price it will be one of the best buildings for the cost in all our lovely city.

Ingerson & Gore are the contractors. Geo. A. Bordwell is the architect. A goodly portion of the credit for the interior arrangement, however, must be given to the pastor, Rev. E. S. Chapman.

gallery is closed by "slat partitions" the same as the rooms below. When these partitions are all drawn down, the central room is 36 feet square, with octagonal, dome shaped, plastered and paneled ceiling, 35 feet high. It is lighted from four windows in the dome, and one large window in the rear wall, over the Superintendent's platform. This will also be a charming room for prayer and other social meetings, so cozily shut away from the outer world, and capable of being enlarged at pleasure. The gallery floor is sufficiently inclined to afford a good view of the lower

Low Ceilings.

THERE was a time—and it was not many years ago—when it seemed that a ceiling could not possibly be too high. Ordinary rooms in an ordinary house—rooms with a width of thirteen or fourteen feet—were made with their height equal to their width, and people rejoiced to think how airy their habitations were. But the openings into these lofty rooms were not always of height proportionate to the apartment, and three or four feet of warm vitiated air at the top of a room is of no benefit to its inmates. A few years ago it became the fashion to study the roadside hostelries, old farm-houses, and country dwellings built here and in England in the century preceding the declaration of independence. These models had low ceilings, often so low that a tall man might bump his head against a beam, doors so low that the same unfortunate individual was compelled to stoop on entering, and windows, for these were the days of dear glass, so low that their width exceeded their height. These windows were filled with small panes, which in older examples were set in lead and formed part of a casement—and in other cases were puttied into wooden sash-bars that kept out half the light. It became the fashion to copy these inconveniences, which builders of the time would have gladly dispensed with had they known how, and thus it comes to pass that a modern "cottage," as it is now the fashion to call what a few years since would have been styled a "villa" or a "mansion," must have disproportionately low ceilings, and either leaded lights in awkward casements, or tiny square panes in tavern-looking sashes.

Shade of common sense—is humanity crazy, that it thus jumps from one extreme to the other? Must we live in rooms eight feet or eight-and-a-half feet in height, with windows the top of which is scarcely level with our heads, just because our worthy great-great-grandfathers did so? Because an unventilated lofty parlor is a waste of money and space, must I reside in a parlor so low that it cannot be ventilated quickly enough to be healthy? It gives a sort of cemetery sensation to enter a modern room, 20 feet by 14 feet by eight feet high, and oh, it's such a stuffy death!

It is strange that almost everyone, when making a comparison, forgets the first condition of a comparison, viz., other things being equal. It is undeniable that a ceiling may be too high. There is such a thing as proportion, and too great a height is money and space wasted in the production of disproportion. The heights of rooms in an ordinary house must oscillate between numbers the largest of which is not twice the smallest, and must, moreover, as a rule be the same throughout a story, whether the room be large or small. The problem is to get the best average height, the height which best combines the requirements of proportion, fresh air, and economy. It is evident that this height ought, so far as proportion goes, to be greater in a house having large rooms than in one in which the length and breadth of the rooms is smaller, but considerations of economy check the increase of height in the former case, while the necessity of head room and cubic air space limit it in the opposite direction.

The only way to arrive at a sensible compromise between mere fashion and economy on the one hand, and the claims of proportion, light, air, and liberty on the other, is to ask the question, For a room of a given length and width, what is the best height?

For example, what is the best height for a rectangular room 20 feet by 14 feet? The writer places it at 11 feet. If the room were a square of 14 feet, 10 feet would be sufficient height.

It would be interesting to hear opinions upon these matters, provided always that admiration of a low ceiling because it is the fashion were not allowed as an opinion.

The matter greatly concerns the health and comfort of everyone. Landlords and speculating builders are taking greedy advantage of the fashion which enables them to charge for houses containing about three-fourths of the cubic contents once thought a necessity, prices in excess of those formerly charged for the larger cube. The clinching argument in favor of low ceilings is usually economy in heating. Still greater economy in heating could be gained by living in an air-tight box of six feet cube. We approach this condition of things too nearly as it is, with our furnace flues pouring in hot, dry air, and our windows filled with rubber strips.—*W. N. Lockington, in Builder and Decorator.*

Shingles in Modern Architecture.

THOSE who have watched the tendency, or, we may say, the evolution, of style in wooden suburban and country houses, must have noticed the gradual disappearance of the monotonous and uninteresting clapboard, with its uncompromising horizontal lines.

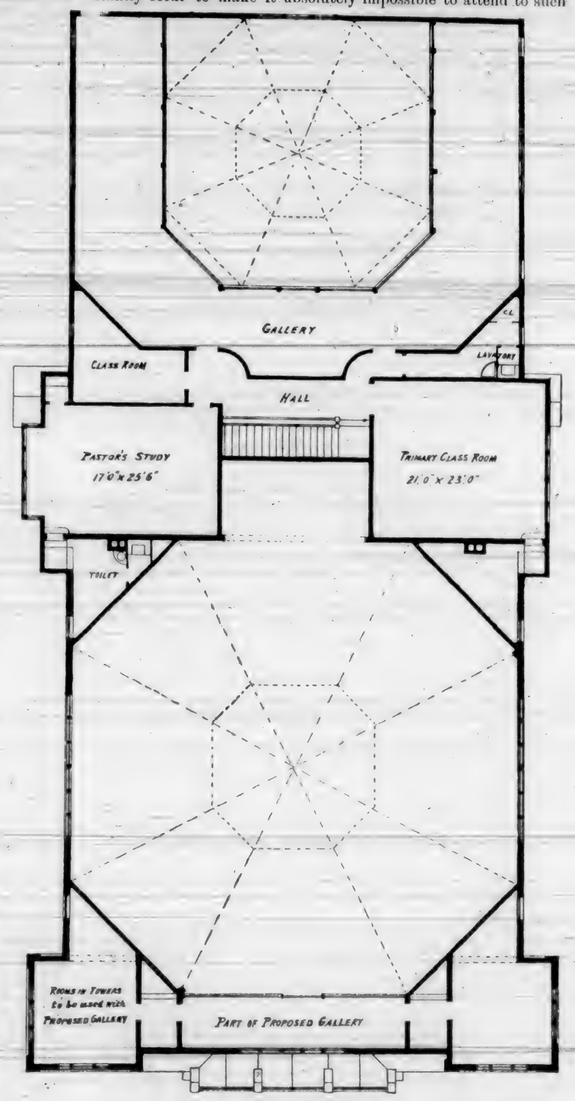
The cry is, "The clapboard must go," and it is going. But what is replacing it? The answer is instantaneous—the shingle. With the many ingenious methods of laying shingles, the greatest variety of effect can be obtained without cutting them at all.

But now comes the important question of coloring. At first paint was used, but the dull monotony of masses of color covering the grain of the wood has now almost universally given way before the modern creosote stains. Many attempts have been made to imitate the effect of stains without using creosote, but they have been sad failures, as other oils do not penetrate the wood and bring out the grain in relief. A test was recently made at the request of well-known architects of Boston, by a prominent chemist, of all the materials sold under the name of "stains." The result was that he pronounced "Cabot's Creosote Stains" among the best of them all.

These creosote stains have already been so long in use that the preserving properties of the creosote have begun to show their value on houses in all parts of the United States.

Planning of Rooms.

WHATEVER the length of a room may be, it will not be disagreeably proportioned if its height and breadth are the same: and if the length may be limited, once and a half the breadth is the most pleasing. Galleries, of course, will be much longer than that proportion, and the corridors will necessarily be narrower than they are high. Entrance halls should be cubical, regularly polygonal, or circular. Access should be given to a room by the end; it should be lighted on one side, and the fire-place may be at the other end, or on the other side; if the former, there should be two doors, or one and the appearance of another, that the fire-place may be immediately opposite a door. Many things, however, from localities and otherwise, constantly occur to make it absolutely impossible to attend to such suggestions as these. In halls and saloons not commanding a pleasing view, the windows may be advantageously placed above the usual level, for agreeable effect, for light, and for ventilation. In rooms lighted from above, as the Pantheon in Rome is, a columnar ordinance may be judiciously adapted, but otherwise columns and their accessories can seldom be well disposed internally.—*W. Hosking, in Carpentry and Building.*



Plan of Second Floor.

Questions and Answers.

Enlarging Drawings.—John R. McC. writes: What is the quickest and most practical way to enlarge architectural and other drawings?

Answer—For accuracy and speed photography is to be recommended; but as this necessitates special apparatus and some amount of skill, you would probably find that the instrument known as the "pantagraph" would suit your purpose. These may be purchased at any store where artist's instruments are sold for from 25 cents to $20, and after a little practice are easily used, and prove very accurate. In the absence of this instrument, the enlargement may be executed by first drawing a number of parallel lines over the drawing at equal distances apart, and then other parallel lines at right angles. These are taken as the basis of measurements. Upon the plain sheet of paper lines at right angles to one another like those on the drawing are formed. Measuring with the two different scales of the original drawing and copy, an enlargement may soon be produced. Full details of the process will be found given in any of the manuals of drawing. The proportional compasses will be found to be a material assistance in the operation.

Burnt Clay for Concrete.—S. T. W. writes: In a recent number of your journal I see burnt clay is recommended as a good substitute, both for ballast to be used in forming concrete, and for sand to be used in making ordinary mortar. Will you please give me some further particulars as to the manner in which it should be prepared?

Ans.—The clay chosen for this purpose should be a stiff one. A suitable quantity having been dug, it is mixed with coal dust or small coal, and piled in a heap, previous to which a suitable fire is formed at the bottom consisting of wood, shavings, or straw, with small pieces of wood on top, then larger pieces, and finally some large coal. The fire is lighted through a touch-hole left for the purpose, and the bulk of the clay is added after it becomes well alight. In using burnt clay for ballast, it needs only breaking up; but used in lieu of sand, it will need grinding. Great care must be taken that the whole of the clay used is thoroughly well burnt.

Artificial Stone—Valuable Patent Right for Sale.

(SEE ALSO OUTSIDE BACK COVER.)

We would call attention to the description below of a new compound for artificial stone, samples of which may be seen at this office.

COMPOSITION FOR ARTIFICIAL STONE, ETC.

John Lorenz, of Muskegon, Michigan, has invented a new and useful composition forming an artificial stone, to be used in the construction of walls, paving, and all other purposes in which an artificial stone is applicable.

The nature of his invention consists in a proper combination of ashes and cinders, or clinkers, with ordinary cement to form a perfect and durable artificial stone, for the purpose above specified. A material has been used for these purposes, composed of clear ashes and cement, and also of clear cinders and cement, as well as these materials combined with lime or adhesive substances; but so far as our knowledge extends, no one but the inventor has yet used the compound formed of ashes and cinders with cement.

Experience has shown that artificial stone made of ashes and cement is susceptible to the action of the elements to such a degree as to cause it to soften, scale, crack, and easily wear out; and, further, artificial stone made from cinders and cement has been found to be too gritty for many of the purposes hereinbefore set forth, is liable to become rough by use, and requires a very large amount of cement in its formation, and consequently is more expensive than stone constructed by a combination of ashes with cinders and cement. By experiment I have demonstrated that this combination produces a stone which will not be injuriously affected by heat, water, or frost, and is, therefore, free from cracking, crumbling, scaling, or softening, and can be dressed and polished to such an extent as may be required.

The right to manufacture above on the Pacific Coast is offered for sale. Please notice adv. on outside back cover. Full particulers can be had at this office.

Material for One Hundred Yards of Three-Coat Plastering.

Eight bushels of good lime, one bushel of hair, one load of sand, one barrel of plaster of paris. Two of the eight bushels of the lime are required for the second coat; 1,440 lath, 10 pounds of nails, will do 100 yards of lathing.

COUNTRY
BUILDING INTELLIGENCE

In this and succeeding issues we intend to devote considerable space to information in connection with buildings, from every portion of the coast.

Only reliable news will be found in this column. Our custom has been for the past eight years, to furnish only data which could be relied upon. We will not publish rumors of "THIS AND THAT IS GOING ON" unless we are reasonably assured that such is truly the case. In all cases we will file our authority for any statements made in this column. No doubt mistakes will sometimes occur, but these we intend to be a rare exception to our rule of reliable news.

We desire the co-operation of country editors and mechanics to this department of this journal. By spreading the news of building engagement in your part of the country, you enhance the value of your section by proclaiming it a go-ahead community.

Architects should also notify us of "plans to figure on;" we do not charge anything for the insertion of such notices. Remember this journal is in the EIGHTH YEAR of its existence, and is the only journal published this side of the Rocky Mountains in the interest of Architects, Contractors, and Material Men.

Colton.

W. R. Fox, M. D. Residence, frame. J. F. Walin, contractor. Amount $6,440. E. Newcomer, architect.

Mural Painting (new), for $3.00.
Home Hand-Book, for $10.00.

M. A. Murphy. Residence, frame. J. F. Walin, contractor. Amount, $3,360. Jones & Griffiths, architects.

Limes, Cements, and Mortars, for $4.00.
History of Architecture, for $15.00.

Transcontinental Hotel, additions. E. Newcomer, architect. Cost about $5,000.

Shavings and Sawdust, for $1.50.
American Cottage Building, for $3.50.

Methodist Church Society, frame church. Wm. Pierce, contractor. Cost, $2,650. E. Newcomer, superintendent.

Architecture and Building, $3.50.
American Cottage Building, for $3.50.

Florida, San Jacinto Co., Cal.

Kerr & Young's Hotel, frame. Amount, $10,000. E. Newcomer, architect.

Oakland.

St. Mary's College. Architect, J. J. Clark; contractor, Remillard & Co. Cost of brick work, $43,000.

Oregon.

At Salem, contracts have been let for the construction of the new wing to the Insane Asylum. It will cost $9,000.

Artisan, for $5.00.
Builders' Guide, for $2.00.

A. H. Johnson will build a warehouse on his dock at the foot of K Street.

Practical Perspective, for $5.00.
Woodward's Country Homes, for $1.50.

A two story frame dwelling is being built on the corner of Seventeenth and N Streets for John Myer.

American House Carpenter, for $5.00.
Cutting Tools, for $2.00.

R. P. Earhart, ex-Secretary of State, is having a handsome building built on Tenth Street, between Mill and Market, to cost $7,000.

Woodward's Country Homes, for $1.50.
Plaster, How to Make it, for $1.00.

A great shingle-making industry can be built up on the Sound, where there are unsurpassed facilities for the manufacture of cedar shingles. The *Oregonian*, in speaking of the growing demand for cedar shingles in the East, says: "This week a local house received a telegraphic order for fifty car loads of cedar shingles. Orders from Ohio, Missouri and other Eastern points have been and are being filled almost daily. A Pittsburg man desires a great quantity, which could not be supplied at this time."

Steel Square Problems, for $1.00.
Workshop Companion, for 35c.

J. A. Van Easton will erect a $2,000 residence.

Builders' Companion, for $1.50.
Artistic Homes, for $3.50.

The new temple of the A. O. U. W. will be erected on an available site not further back than Fourth Street, and between Salmon and Oak. The building will be of brick, and cost not less than $70,000.

Wonders of Art, for $1.25.
History of Architecture, for $15.00.

The four-story addition to the Portland Savings Bank building on Washington Street will be commenced at once. It will cost about $17,000. Contract has been let for the work this week.

Builders' Companion, for $1.50.
Builders' Work, for $5.00.

Three frame stores are being built by Charles Logus on Fourth Street between K and L, Portland, to cost $3,000.

Ruskin's Works (four volumes), for $6.00.
Industrial Drawing for Carpenters, for $2.00.

Redlands.

Stimmel & Lissenden, store and office. Brick building. Cost, $5,800.

Artistic Homes, for $3.50.
Modern House Painting, for $5.00.

Y. M. C. A. Brick building. Cost, $4,000. Brooks, contractor.

American Cottage Homes, for $3.00.
Builders' Work, for $5.00.

Mrs. C. Wells. Frame residence. Lancaster & Minor, contractors. Cost, $3,000. E. Newcomer, architect.

Practical Perspective, for $3.00.
History of Architecture, for $15.

Sloan's Hotel building, brick. Cost, $15,000. S. J. Logie, architect and contractor.

American House Carpenter, for $5.00.
Cutting Tools, for $2.00.

Washington Territory.

At Puyallup, a $12,000 hotel is being erected.

Science of Carpentry, for $4.00.
Universal Assistant, for $2.50.

Contract Let.—The Portland man, who put in the lowest bid for the construction of the Methodist Church in Seattle, raised his bid from $24,000 to $30,000, and finally backed out altogether and went home. The trustees immediately decided to build a brick basement, and construct the superstructure of wood. We are authorized by Rev. A. J. Hanson to state that the contract for the construction of the brick basement has been let to Mr. Parke for $2,950. He will begin work to-day, and his contract requires that the work be completed in 20 days. The basement will be of brick, 13 feet in the clear and be made ready for the superstructure, which will be let as soon as the foundation is completed.

Building Superintendence, for $3.00.
American Cottage Homes, for $3.00.

A four-story brick block 100x115 feet, is to be erected on the corner of Ninth Street and Pacific Avenue in Tacoma, for W. H. Fife. Cost nearly $80,000.

At Garfield a school building will be erected. Lawrence & Holbrook are the contractors.

Miscellaneous.

Bids for Proposed New School-houses in S. F.—Bids were opened for building, according to plans and specifications of the department architect, two school-houses, one on Union Street near Franklin, and the other on Page Street between Baker and Broderick. The bids were as follows:—

Bidders.	Union Street School.	Page Street School.
John Blake	$23,978	.....
A. McElroy	.....	$23,494
T. C. Riddell	24,350	23,990
Moore Bros.	25,453	25,493
S. P. Green	21,995	22,695
J. H. McKay	18,440	18,940
John J. Dunn	25,993	26,695
H. T. Bray & Co.	20,796	21,396
G. W. & J. W. Hansbrough	23,400	23,800

[Contract was awarded to J. H. McKay for Union Street school-house, at figures given.]

Ray White is building a two-story house on his Central Colony property in Fresno.

Practical Perspective, for $5.00.
Drawing for Carpenters, for $1.75.

Building is very brisk in East Oakland and a large number of buildings is going up in all portions of the eastern part of town. One of the reasons for this is the fact that a large number of good building lots is changing hands and as a natural consequence buildings are going up in many parts of town. There is a tendency here to erect houses with some attempt at ornament and the severe straight outline of the old-time building is a thing of the past. The new Williams Block on East Twelfth Street, the Fowler building on the corner of East Fourteenth Street and Thirteenth Avenue, and the Look & Leonard building opposite, testify to the new styles in vogue. In dwellings the tendency is the same way, and while the architecture is often very mixed, still the architect and the builder both show a desire to depart from the old style of cottage with the false second story, and make some improvements.

Drawing for Stone Masons, for $1.50.
Building Construction, for $1.25.

The sum of $2,300 has been subscribed by the Trustees of the University of the Pacific for the construction and completion of the fourth story to the East Hall building.

Builders' Companion, for $1.50.
Builders' Work, for $5.00.

The contract for the building of a quartz mill for the Centennial Mining Company at Genesse Valley, California, has been awarded to George Brandt, of Reno.

Hand Railing and Stair Casing, for $1.50.
Drawing for Carpenters, for $1.75.

The sale of between 40,000 and 45,000 acres of land in a body, lying south of Tulare Lake, to a syndicate of capitalists from Pasadena and Los Angeles, has been completed. Improvements will be commenced at once, including artesian wells, a new town, etc. The consideration is about $450,000.

Builders' Companion, for $1.50.
Builders' Work, for $5.00.

The railroad company are putting up their depot at South Riverside as fast as they can obtain labor and materials. The frame will be up this week.

American House Carpenter, for $5.00.
Cutting Tools, for $2.00.

At Riverside G. H. Brown will build a $5,000 residence.

Plaster, How to Make It, for $1.00.
Shavings and Sawdust, for $1.50.

It now appears that the building of the City Hall is attracting attention outside of San Jose. Several contractors from San Francisco, Stockton and other places are figuring on the work.

Grimshaw on Saws, for $4.00.
Mechanics' Geometry, for $4.00.

Burnam Bros. have enlarged their wine cellar in Bennett Valley.

Builders' Work, for $5.00.
Building Superintendence, for $3.00.

Aaron Hassett will build a new winery at Healdsburg. Capacity, 25,000 gallons.

Lumberman's Hand-Book, for $2.00.
Practical Geometry, for $1.00.

It will take nearly 300,000 feet of lumber to build the timber foundation of Hotel Rubidoux, the work on which will be commenced this week.

Cutting Tools, for $2.00.
Cumming's Details, for $5.00.

It is stated to-day that the Santa Fe, the Southern Pacific (Altadena Road probably) and the Long Beach and Pasadena Electric Railway are to immediately build a mammoth new depot of fine architectural design at Raymond Station.

Plaster, How to Make It, for $1.00.
Shavings and Sawdust, for $1.50.

At Brooklyn, Alameda Co., Mr Frank Moryer is building a $2,000 house, Martin & McGuire are contractors.

Universal Assistant, for $2.50.
Practical Perspective, for $5.00.

Swaine & Hudson, of Marysville, were the successful bidders for constructing the new Hesperian College at Woodland, their bid being $16,780.

SAN FRANCISCO BUILDING NEWS.

A

Ashbury, nr. Waller. Two-story frame.
O.—W. T. James.
C.—A. R. Denke.
$4,700.

B

Belcher, cor. Fourteenth. Three-story frame.
O.—Mr. O. Day.
C.—J. Mooney.
$3,500.

Broderick, nr. Fulton. Three-story frame.
O.—Mr Rider.
A.—W. C. Hoagland.
C.—R. Curry.
$5,500.

Bluxome, bet. Fourth and Fifth. Additions.
O.—Mrs. M. F. Hopkins.
A.—Moore & Schultze.
C.—J. T. Grant.
$3,000.

Bush, bet. Jones and Leavenworth. Frame building.
O.—P. Boland.
A.—Charles Devlin.
C.—Moore Bros.
$7,500.

Broadway, bet. Mason and Taylor. Two-story frame.
O.—F. Grinley.
A.—W. Armitage.
C.—A. McDonald.
$2,250.

C

Calvary Cemetery. Tomb.
O.—A. Welch.
A.—J. J. Clark.
C.—Degan & Orford.
$1,700.

Clementina, No. 440. Additions.
$1,000.

Clementina, No. 442. Additions.
$1,000.

Commercial, nr. Sansome. Brick building.
O.—J. H. Fisher.
A.—H. Geilfuss.
C.—Haaf & Son.
$13,000.

D

Dolores, cor Twenty second. Two-story frame.
C.—F Weineohl.
$5,500.

Devisadero, bet Sutter and Post. Two-story frame.
O.—B. Hacker.
A.—John & Zimmerman.
C.—B. Dryer.
$8,000.

Devisadero, nr. Grove. Two-story frame.
O.—F. Rider.
A.—W. C. Hoagland.
C.—R. Curry.
$6,000.

E

Eighteenth, corner Shotwell. Two stories and basement.
O.—Rev. P. Cummins.
A.—C. Devlin.
Mason—O. E. Brady.
Carp.—Bateman Bros.
$18,000.

Eighth, bet. Mission and Minna. Two-story frame.
O.—J. Andreas.
A.—John & Zimmerman.
C.—A. Miller.
$7,500.

F

Folsom, cor. Twelfth. Two three-story frames.
O.—T. Murphy.
A.—T. J. Welsh.
C.—J. McInery.
$9,500.

Fell, nr. Fillmore. Two-story frame.
O.—J. Fogarty.
C.—J. Houston.
$2,500.

Fourth, cor. Welsh. Three-story frame.
O.—J. Shirley.
A.—Pissis & Moore.
C.—A. Jackson.
$22,000.

Fifth, Nos. 426 and 428. Additions.
O.—J. Loefter.
$800.

Folsom, nr. Sixth. Additions.
$600.

Fulton, cor. Octavia. Two three-story frames.
O.—Mrs. C. Curby.
A.—C. Kenitzer.
C.—A. Miller.
$17,000.

Folsom, bet. Fourth and Fifth. Three-story frame.
O.—C. Ingwersen.
A.—M. J. Welsh.
C.—C. Zwierlein.
$5,000.

G

Gough, cor. O'Farrell. Frame building.
O.—Mrs. Hope.
A.—T. J. Welsh.
C.—J. L. Binet.
$17,000.

Golden Gate Avenue, nr. Octavia. Two-story frame.
$1,000.

Guerrero, nr. Twenty-third. Three two-story frames.
O.—B. Edwards.
$7,000.

Guerrero, nr Twenty-third. One-story frame.
O.—T L Smith.
C.—Rountree Bros.
$1,600.

Guerrero, bet. Fourteenth and Fifteenth. Two-story frame.
O.—J. Wolf.
A.—Huerne & Everett.
C.—E. Buckley.
$4,200.

Guerrero, bet. Twenty-fifth and Twenty-sixth. Two-story frame.
O.—M. Quinn.
C.—G. Houston.
$2,600.

Geary, cor Franklin, Unitarian Church.
A.—Percy & Hamilton.
Mason.—O. E. Brady.
Carp.—Gray & Stover.
$60,000.

Golden Gate, cor. Masonic ave. Two-story frame.
O.—Protestant Episcopal Old Ladies' Home.
A.—C. V. Pierce.
C.—Kincaid & Thompson.
$20,000.

H

Haight, bet Broderick and Baker. Two-story frame.
O.—L. L. Janes.
A.—J. J. Clark.
C.—J. G. Adams.
$3,000.

Howard, bet. Third and Fourth. Additions.
$600.

Harrison, No. 728. Improvements.
$2,000.

Harrison, cor Fifth. Additions.
$800.

Haight, cor. Broderick. Three-story frame.
O.—A. Boomer.
A.—Townsend & Wyneken.
C.—A. McElroy.
$13,500.

Hayes, cor. Polk. Additions Mechanics' Pavilion.
$1,000.

Haight, nr. Steiner. Two-story frame.
O.—J. Weise.
A.—John & Zimmerman.
C.—B. Dryer.
$4,500.

L

Larkin, nr. Pine. Additions.
$500.

Larkin, cor. Washington. One-story frame.
O.—J. F. Stewart.
C.—R. M. Murray.
$3,000.

M

Mission, nr. Thirtieth. Two-story frame
O.—M. Molloy.
Day work.
$3,000.

Mason, cor. Filbert. Additions.
$800.

Market, bet. Van Ness and Franklin. Four-story frame.
O.—E. Le Roy.
A.—Pissis & Moore.
C.—H. A. Conrad.
$23,000.

Market, nr. Sixth. Store fittings.
O.—Keane Bros.
A.—T. J. Welsh.
C.—Kemp & Co.
$5,000.

Market, nr. Fourth. One-story brick.
O.—H. G. Fiske.
$1,000.

Madison Avenue, nr. Harrison. Additions.
O.—A. Trobock.
A.—W. H. Wharff.
C.—F. E. Dunbar.
$1,200.

McAllister, cor. Hyde. Four-story frame.
O.—Mrs. L. Albretch.
A.—Wright & Sanders.
C.—J. H. McKay.
$17,000.

Market, nr. Fifth. Store fittings.
O.—P. F. Butler.
$1,800.

Market, bet. Third and Fourth. Brick building.
O.—W. H. Brown.
A.—J. J. & T. D. Newsom.
C.—D. Jordan.
$18,000.

N

New City Hall. Improvements.
O.—City of San Francisco.
A.—A. Laver.
C.—M. J. Kelley.
$100,000.

O

Octavia, cor. Golden Gate Avenue. Alterations.
O.—Mr. John.
A.—John & Zimmerman.
$1,500.

Oak, cor. Gough. Two two-story frames.
O.—W. J. Byran.
A.—J. A. Whelan.
C.—R. O. Chandler.
$3,000.

P

Pine, nr. Devisadero. One-story frame.
$1,000.

Powell, nr. Clay. Alterations.
O.—Commercial School.
A.—T. J. Welsh.
C.—Bateman.
$7,000.

Polk, nr. California. Additions.
$600.

Palace Hotel. Additions.
C.—S. M. Hills.
$4,000.

Page, nr. Broderick. Two-story frame.
O.—P. J. Euler.
A.—J. Marquis.
C.—Martin & Maguire.
$6,000.

Pacific Avenue, nr. Lyon. Frame building.
O.—J. Nash.
A.—J. Marquis.
C.—Bateman Bros.
$9,000.

Polk, cor. Union. Two-story frame.
O.—J. Cantro.
C.—M. Shay.
$3,700.

Pine, cor. Franklin. Alterations.
O.—H. Simon.
C.—Langstaff.
$4,000.

Pine, nr. Baker. Two-story frame.
O.—P. Furst.
A.—Saltield & Kohlberg.
C.—C. Roeler.
$5,500.

R

Railroad Avenue, nr. Twelfth. One-story frame.
O.—G. Kirchner.
$1,000.

Railroad Avenue, Nos. 97 and 99. Additions.
$1,000.

S

San Jose, cor. Twenty-fourth. Additions.
$700.

Solano, nr. Minnesota. Two-story frame.
O.—J. Mooney.
A.—Townsend & Wyneken.
C.—C. E. Dunshee.
$4,200.

Sutter, nr. Pierce. Two-story frame.
O.—S. Siegel.
A.—Salfield & Kohlberg.
C.—Weissman.
$6,500.

Sutter, nr. Taylor. Additions.
O.—Mrs. Irnesdell.
C.—J. B. Gonyeau.
$1,800.

St. Peter's Convent.
O.—Sisters of Mercy.
A.—J. J. Clark.
B.—J. W. Smith.
Day work.
$5,000.

St. George Place, nr. Pine. Two-story brick.
O.—P. H. Seymour.
A.—P. O'Connor.
Carp.—R. McCann.
$12,000.

San Jose Avenue, cor. Twenty-fifth. Two-story frame.
O.—C. Depuy.
A.—McDougall & Son.
C.—Nelson.
$8,000.

San Jose Avenue, nr. Twenty-fourth. Additions.
$1,000.

Stevenson, nr. Eighteenth. Additions.
O.—H. Henderson.
A.—M. J. Welsh.
C.—D. Chisholm.
$1,500.

Sutter, nr. Jones. Two-story frame.
O.—C. Hathaway.
A.—P. R. Schmidt.
C.—S. H. Kent.
$9,500.

Seventeenth, bet. Valencia and Guerrero. One-story frame.
O.—R. Gatto.
A.—Copeland & Banks.
C.—W. Pluns.
$2,700.

T

Tehama, nr. Second. Four flats.
O.—J. H. Tomkinson.
A.—J. J. Clark.
Day work.
$3,500.

Tenth, nr. Howard. Alterations.
O.—St. Joseph's Church.
A.—J. J. Clark.
Day work.
$2,000.

Twelfth, bet. Mission and Howard. Additions.
O.—P. Spreckles.
A.—John & Zimmerman.
C.—B. Knaus.
$3,000.

Twenty-second, nr. Dolores. Additions.
$1,200.

Twenty-fifth, nr. Bartlett. Two-story frame.
O. and B.—Ellis.
$2,500.

Turk, nr. Buchanan. Two two-story frames.
O.—W. Vellguth.
A.—J. Newson.
C.—M. Lynch.
$11,000.

Twenty-third, nr. Bryant. Frame building.
O.—P. Collins.
A.—M. J. Welsh.
C.—A. Klahn.
$1,200.

Twenty-second, nr. Dolores. Additions.
O.—J. Hughes.
C.—Doyle & Son.
$1,700.

U

Union, nr. Mason. Two two-story frames.
O.—Mrs. Lachman.
C.—J. P. Hanson.
$7,600.

V

Valencia, nr. Twentieth. Additions.
O.—Farnsworth.
$4,000.

Vallejo, above Mason. Two-story frame.
O. and B.—J. P. Hanson.
$3,600.

W

Waller, nr. Broderick. Two-story frame.
O.—Sarah Hillyer.
C.—Thomas Elam.
$2,000.

Webster, nr. California. Additions.
O.—J. Coffey.
C.—W. Pluns.
$1,500.

Z

Zoe, bet. Bryant and Brannan. Additions.
O.—Mrs. L. McCormick.
C.—M. C. Lynch.
$4,500.

Notes.

THE cause of sewer gas in a house may often be traced to an uncleaned catch-basin.

FINISH pockets to slide doors air-tight, and thus avoid a common mistake made by builders.

HIGH doors are fast being relegated to the past; wide openings appropriately draped are much in vogue.

RUBBER stops for windows, instead of wood, do away with that nuisance termed weather strips.

IN designing your house, thoroughly study your plan before contracting, thus saving much annoyance and extras.

He who expects to build a three-thousand-dollar house for two, either believes a builder a supernatural being, or pays his attorney by the year.

LOOSE SCREWS.—It is a common thing when a screw or staple becomes loose, to draw it out, plug up the hole or holes with wood, and then re-insert it. But screws and staples so secured soon come out again. It has been found that a much better way is to fill up the holes tightly with cork. Screws and irons so secured will remain perfectly tight just as long as when put into new wood.

A Carpenter and His Shavings.

A prominent city landlord, who is putting up many of the wooden houses in a district which is being rapidly filled, when asked by an old resident for a few barrels of shavings the other day, replied: "We don't have any shavings in the houses now; they are all made at the mill, and you will have to go there for them." I don't believe that the carpenters nowadays make more than a barrel of shavings in building a house. Modern residences are put up pretty much as Solomon's temple was, the parts are brought together all prepared and fitted, and it is short and easy work to put them together.

The wooden house is turned out of a saw and planing mill much as if it were a toy block. Like ready-made clothes, the average mechanic can put up a ready-made house, while there is still the same opportunity for elaborate workmanship and outlay as in fine clothing.

WE have received the Prospectus of the Academy of Architecture and Building, located at 3066 South Ninth Street, St. Louis, Missouri, of which H. Maack is the principal. The institute is designed to be for the building trades what the commercial colleges are for business men. Instruction is to be given only during the winter, leaving young mechanics their time to devote to remunerative employment during the busier months of the year. By this means, it is argued, young men who could not otherwise afford the cost of instruction, will be enabled to avail themselves of the opportunities afforded. The circular contains the course of study through three terms, and also indicates the requirements for admission, as well as cost. This enterprise seems to be a commendable effort to afford technical education in a form to be of the greatest service to young mechanics in the building trades.

Table of Multipliers for Short Calculations to Ascertain the Number of Pounds.

FOR	cast iron	multiply	the	cubic	inches	by	260
"	"	"	"	"	feet	"	450
"	wrought iron	"	"	"	inches	"	281
"	"	"	"	"	feet	"	487
"	stone	"	"	"	inches	"	9
"	"	"	"	"	feet	"	156
"	lead	"	"	"	inches	"	41
"	"	"	"	"	feet	"	710
"	oak	"	"	"	inches	"	33
"	"	"	"	"	feet	"	58
"	clay	"	"	"	inches	"	78
"	"	"	"	"	feet	"	135
"	water	"	"	"	inches	"	36
"	"	"	"	"	feet	by	$62\frac{5}{100}$

AMERICAN GLOSSARY OF ARCHITECTURAL TERMS.

PRICE, FIVE DOLLARS.

IN our notice of this really excellent publication in our last issue, we inadvertently gave the price at $2.50. It should have been $5.00. A consignment is now on the way, and all orders can be promptly filled.

HILL'S PATENT INSIDE SLIDING BLINDS.

THAT advertising does pay is shown by the re-insertion of the advertisement of above blinds. The rushing city manager, Mr. Hindes, concluded that he would not be *blind* to his own interests any longer, and so is reaching out for the trade of the whole Pacific Coast. This journal was selected by him as the most proper medium to secure that end, and the result will soon be shown in the numerous orders that will pour in upon him.

POOR'S DIRECTORY OF RAILWAY OFFICIALS.

PRICE, TWO DOLLARS.

THIS publication for 1887 (the second annual number) has just been issued. It contains very complete and admirably arranged lists of steam and street railroad officials corrected up to the time of publication; also lists of car and locomotive builders, car axle, wheel and spring manufacturers, railroad contractors, bridge builders, and rail mills. In addition to the general list of railroads, which for convenience is made to conform to that of the "Manual," there are special lists of general managers, general superintendents, freight and passenger agents, master mechanics, master car builders, master car painters, purchasing agents, and chief engineers. The volume also contains an alphabetical list of the names of all the officials in the general list, by means of which the road with which each name is officially connected can be readily referred to. The railroad commissioners of the several States, officers of sleeping and parlor car companies, and a list of Mexican and Central and South American railroads, are also given. The "Directory" is intended to be supplemental to the "Manual," and contains a vast amount of information which cannot be given in the larger publication without increasing its size to unwieldly dimensions. It should be noted that in one respect the present number of the "Directory" is a great improvement upon that of last year; it opens sideways like an ordinary book, instead of endways.

Market Reports.

THE retail price list of the California Lumber Exchange for September 9, 1887, is as follows:

Pine, Rough, per M feet	$22 50
Pine, Rough, No. 2	18 50
Pine, Rough, 40 to 50 feet lengths	23 50
Pine, Rough, 50 to 60 feet lengths	24 50
Pine, Rough, 60 to 70 feet lengths	25 50
Pine, Selected	26 50
Pine, Clear	33 50
Pine, Fire Wood	10 00
T. & G. Flooring, 1x6	35 00
T. & G. Flooring, 1¼x6, 1x4, 1¼x4, 1¼x3, 1x3 and narrower	40 00
T. & G. Flooring, No. 2	29 50
Stepping	45 00
Stepping, No. 2	32 50
Redwood, Rough	22 50
Redwood, Rough, No. 2	18 50
Redwood, Surfaced	37 50
Redwood, T. & G. 6 in., 12 feet and over	34 00
Redwood, T. & G. 6 in., 7 to 11 feet	27 00
Redwood, T. & G. 6 in., under 7 feet	24 00
Redwood, Rustic	37 50
Redwood, Rustic, No. 2	32 50
Redwood, T. & G. Beaded, 12 feet and over	36 00
Redwood, T. & G. Beaded, 7 to 11 feet	27 00
Redwood, T. & G. Beaded, under 7 feet	24 00
Redwood, Siding, ½ in	25 00
Pickets, Fancy	26 00
Pickets, Rough Pointed	19 50
Pickets, Rough Square	17 50
Shingles	2 25
Laths, 1½	4 00
Laths, 1½	4 50
Furring, 1x2, per lineal foot	01
Battens, ½x3, per lineal foot	01

THE CALIFORNIA ARCHITECT AND BUILDING NEWS.

VOLUME VIII. ENTERED AT POST-OFFICE, SAN FRANCISCO, AS SECOND-CLASS MAIL MATTER. ESTABLISHED JANUARY, 1879. NUMBER 10.

THE

California Architect & Building News.

Established January, 1879.

The official organ of the San Francisco Chapter American Institute of Architects. Published by the SAN FRANCISCO ARCHITECTURAL PUBLISHING CO. No. 240 MONTGOMERY STREET, Rooms 11, 12, 13.

Terms per annum - - - - $2.00 in advance.

Published on the 15th of each Month.

When money is sent for subscriptions, the receipt of a copy of this Journal is an acknowledgment that it has been received. Unless requested we do not send receipts.

SAN FRANCISCO, CAL., OCT. 15, 1887.

THE attention of architects is called to the proposals for plans for the Provincial Royal Jubilee Hospital at Victoria, B. C. See page 140.

BALTIMORE, Sept. 27, 1887.

CALIFORNIA ARCHITECT AND BUILDING NEWS—*Dear Sirs:* Our advertisement in your September number is of no value to us, but a positive injury, as you have the cut of the pulley upside down. The screw end is the top of the pulley.

Yours respectfully,
C. SYDNEY NORRIS & CO.

While we sincerely dislike to do anything displeasing to our advertising patrons, and especially so when assuming the magnitude of "positive injury," yet we are almost glad that our printer did for once, not knowing nor pretending to know the bottom from the top, perpetrate the blunder of turning things upside down in this case, as it has called out the foregoing communication from the firm interested, and demands of us correction and reply. That a printer might innocently make a mistake of the kind is admissible, but when a competent mechanic, a mill man, who has handled thousands of pulleys, deliberately perpetrates a like error in the practical use and application of the pulley in question, it gives rise to the presumption that some of the gear in his mental mechanical department must be terribly deranged or fractured—very much upside down. For if the mechanical construction of the pulley suggests anything in reference to its proper position, it is that the beveled, dove-tailing end should be placed downward to carry the weight of sash, glass and weights, with the screw in the upper end, simply to hold the head in flush with the pulley stile, the bottom being insufficient for all other purposes.

Messrs. Norris Co. were doubtless provoked almost to madness when the mistake of the printer was noticed, and we can imagine them in a state of frenzy, ready to pull somebody's hair, if not their own; but if they had been called upon to witness what we personally met with during the present season they would have been vexed, *almost* as much as we were, and would have been provoked to say as many naughty words as we uttered, when the window frames containing nearly 200 of the Norris pulleys were delivered at the building with every pulley placed in the pulley stiles just as they appeared in the September issue, top end and screw at bottom, and the beveled bottom end at top.

Had this been the result of a set of "jackknife carpenters'" misconception there would have been the palliation of ignorance or stupidity, but occurring as it did in one of the largest and best equipped mills on this coast, where none but competent workmen are employed, it amounts to a sort of hallucination, in which the faculties became deranged and finally settled down with the wrong end up.

The excuse. When called to an account the reason given was that when the pulley is placed upside down, the letters of the word "patent" are upright, while when the pulley is rightly placed, "patent" is upside down. There is a small thread of argument and reason in this which Messrs Norris & Co. might correct, as to some extent misleading; but this should weigh nothing in the mind of practical mechanics as against the conclusively certain proper position of the pulley, as clearly shown by its construction.

Merits of the pulley. We have never used a pulley that works prettier, nor gives more complete satisfaction, being positively noiseless, which, in comparison with the distressing rattling noise of the ordinary patent pulley, makes them invaluable, and the smooth steel pins of the axles, and the large smooth grooves in the wheels, assure long wear and great service in both pulley and sash cord. They are safe to recommend any time.

San Francisco Chapter, A. I. A.

THE regular meeting of the Chapter was held on the 7th inst. and was largely attended. President Pissis presided; B. E. Henricksen, Secretary. After reading an approval of minutes, the reception and payment of bills, and the usual routine of business was transacted, the standing committees made report of progress. The Committee on Fire Ordinances also reported, reciting the facts of the interview with the Committee on the Board

of Supervisors, at which were present of Chapter members, Messrs. Pissis, Welsh, Henricksen, Gash, Wolfe, Bestor, Clark and others. The proposed amendments are elsewhere noticed. Gingero Harmada, having been duly proposed at previous meeting, was elected associate member of the Chapter. Several communications were received from the Secretaries of the A. I. A. and the Western Association of Architects, in reference to the annual sessions, inviting co-operation. But the time limiting the opportunity for action having passed, the matter of necessity went to file. The election of officers for the ensuing year was next taken up, and resulted as follows: President, George H. Sanders; Vice-president, E. Moore; Secretary, G. H. Wolfe; Trustees, John Wright, A. Laver, B. E. Henricksen, A. Pissis, James E. Wolfe. Congratulations and general discussion ensued, and the expression of hope and promise that the Chapter, under the efficient leadership of the newly-elected President, would be of the most satisfactory character.

It would be well for the architectural profession upon this coast, if the good and right intent, purpose and work of the Chapter organization could be appreciated and entered into with earnest zeal. Much might be done worthy of doing, and good accomplished without injury to anyone. Why not have it so that there would be an annual gathering of the architects upon this coast, of like character with the other semi-national associations which meet once a year, gathering their members from many States and sections of the country? The American Institute of Architects was the first to organize as a grand or parent organization, for the purpose of concentrating and developing the possibilities of the profession, preserving its grand record of facts and the history of the past as made by the army of worthy men, who, in past periods and ages, did so much to ennoble and magnify the science of architecture. This was followed by other conclaves, embracing one or several States, as the *Western Association of Architects*, and they have all to a greater or less extent accomplished desirable results, and a large degree of enthusiasm attends their annual sessions.

Then why not the architects of this coast enter into the Chapter work, and from thence evolve the *Pacific Coast Association of Architects*, holding its annual sessions, and inviting members of the profession from every section of the United States to visit us? Why not be alive to our professional interests beyond the mere mercenary features, and give a little in time and money to enjoy the rich repayment which would follow and flow through a sectional grand body?

Its Continued Prospects.

NOT boastfully, but in a spirit of appreciation and honest gratitude, we refer to the present healthful and substantial condition of this Journal. It has done well, is now doing well, and the prospects for its future are entirely satisfactory. Its eight years of growth, with their sunshines and storms, has matured it into a thrifty, sturdy and successful enterprise, notwithstanding the many sources of opposition which have aimed to cripple and injure its influence. We do not ask credit for anything brought about by its agency, but those who will follow the currents through from 1879 to the present time, noting the landmarks as they pass along, will scarcely be able to escape the conviction that this journal and its management has exerted an influence in numerous ways for good, and that it has *preceded* in many directions claimed by others as enterprise. No better proof can be asked or given as to its prosperity than reference to its advertising columns, while its subscription list of paying subscribers continues to increase.

Amending the Ordinances.

THE Committee from the Board of Supervisors, Messrs. McDonald, Hawkins and Knorp, with the committee from the Fire Wardens, Messrs. Kelly, Mahoney and Siebe, have for several weeks had before them certain amendments proposed by or from the Fire Warden and Underwriter standpoint, some of which relate especially to building construction, and, therefore, of interest to, and should elicit and receive the personal or delegated attention of, every member of the profession. There is no special duty resting upon any one or limited number of architects to interest themselves in the matter, and if they did, it is altogether likely that the charge of extra officious would be hurled at them by those who will neither do themselves, nor appreciate the doings of others. One of the proposed amendments increases the thickness of walls, and consequently the cost of brick buildings, in that it restricts thirteen-inch walls to the last or upper story only, instead, as heretofore, permitting thirteen-inch walls for the third and fourth, fourth and fifth, etc., stories.

Another proposes to limit the height of buildings to sixty feet from the level of the sidewalk, to the extreme height over all, including main cornice and the horizontal finishes above same. This is insufficient and inadequate as a maximum height, and surely discriminating and unfair as between lots level or on the low or declining grade sides, and those on the high or hill sides of streets—the latter certainly and reasonably requiring greater latitude as to height.

Another proposes relief, by increasing the limit of span between walls, which heretofore has been 85 feet. The amendment suggests 100 feet, but this is opposed by the chief engineer of the fire department, upon the grounds that he *thinks* and *considers* that 85 feet is enough. The architects present before the committee asked that the limit be extended to the full width of buildings erected on 50-vara lots. This was met by the suggestion from the chairman of the committee, that the limit be made equal to two water lots—two-thirds of a 50-vara lot.

Other amendments affecting theaters, halls, and places for public assemblages, elavator shafts, etc., are in the category of the proposed amendments, requiring a great deal of study and just discrimination to render them equitable. The problems involved should receive the earnest attention of several thoroughly practical, qualified minds, to arrive at the best and right conclusion.

The entire ordinance as a whole is a map of more or less crude ideas thrown together in a heap, and nothing short of raking the whole pile over, segregating the good and practical that may be found from the absurd and impractical, and the introduction whole cloth of an entire new construction, will be the successful means of producing a fairly complete fire and building ordinance.

The doubtful and possible of double-construction sections, the unnecessary and absurd requirements and restrictions, the empowering of incompetent men, wholly ignorant of mechanical principles as applied in construction works, to dictate and domineer over those who have applied all the years of their boyhood and manhood to qualify themselves as practical architects or builders, and many other wrong features, render the Ordinance under notice far from fair, just, right and equitable, and most unquestionably objectionable to those who suffer so many vexations and annoyances from an arbitrary, insufficient and imperfect law.

THE Abrahamson Ventilator, a California invention, has proven itself a most valuable and practical device, and is working its way into general use. In addition to the numerous other testimonials in its favor is the fact that it is being included among the indispensable good things in buildings recently erected or to be erected as soon as arrangements can be made—among them, H. Lebes' factory, the three new public schoolhouses, residence of Mr. Swabacher, Clay Street near Franklin, New City Hall, San Jose, Fresno Jail, Presbyterian Churches at Oakland and Alameda, Woodland Bank, United States Mint, and elsewhere.

Building Summary for October.

A summary of our reports shows a decided gain over the similar period of last year. During the month we report:—

63 frame buildings, value	$257,840
2 brick " "	37,200
19 alterations "	55,300
84	$350,340

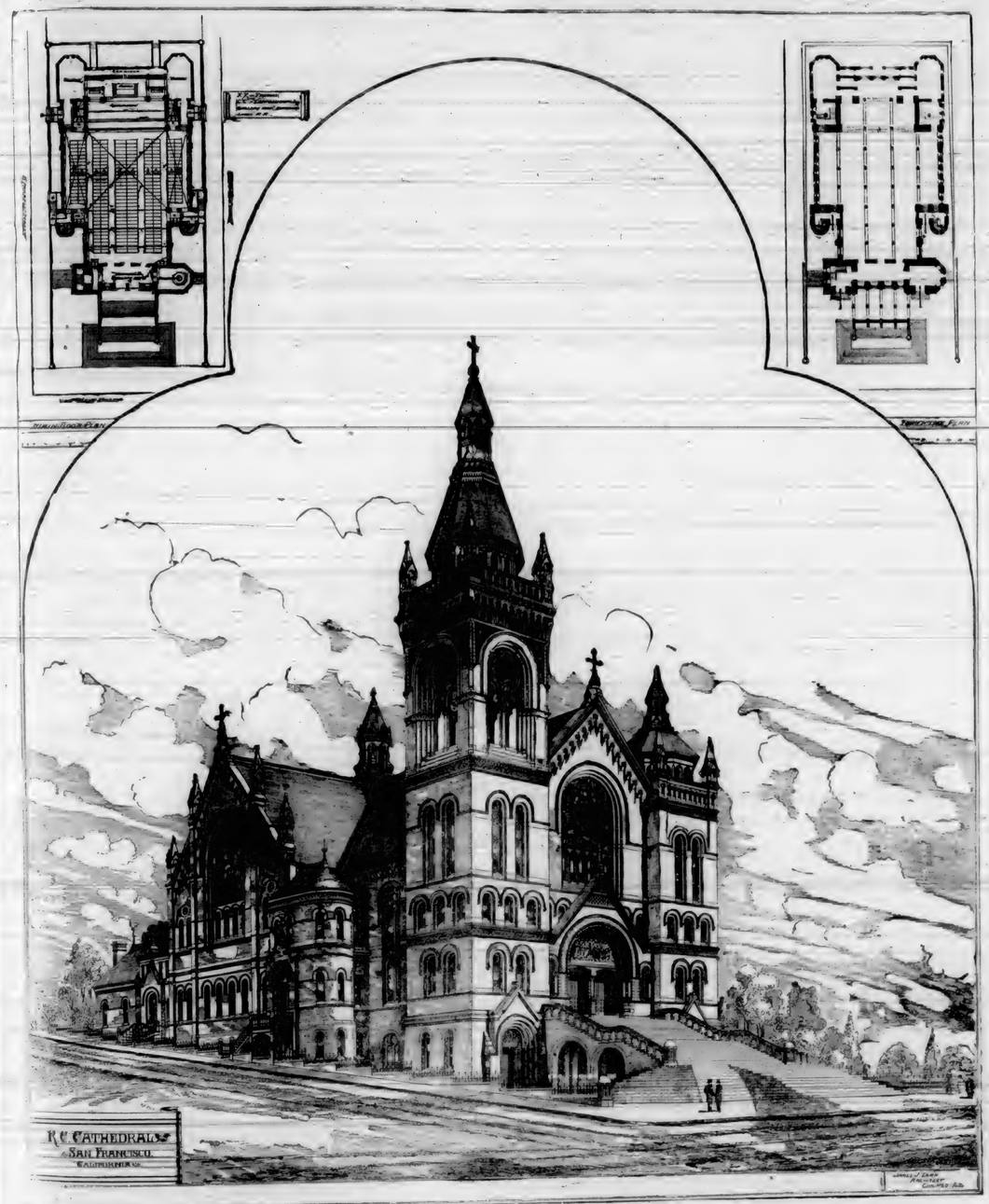
During the first ten months of 1886 the record shows 1,001 buildings; value, $5,107,642.

During the first ten months of 1887, the record shows 923 buildings; value, $5,562,254.

Showing a decrease in *number* of 78, and a gain in *value* of $454,612.

This is a very fine showing. From present appearances the number of improvements made this year will about equal those of 1886, but the value of the same will largely exceed the same in the grand total.

INTERESTING correspondence may be anticipated in the next succeeding issue of this journal, of items gleaned by the wayside, by the editor of this journal, during a trip across the continent, and through nearly all the more prominent cities of the country.



PRESENTED BY THE CALIFORNIA ARCHITECT AND BUILDING NEWS.

PERSPECTIVE VIEW OF THE NEW ST. MARY'S CATHEDRAL.

Corner Van Ness Avenue and O'Farrell Street, San Francisco, California.

California Architect and Building News,

240 Montgomery Street, San Francisco, Cal.

Published Monthly by the San Francisco Architectural Publishing Co.

On the 15th Day of Each Month.

Established January, 1879.

Weekly Building News,

PUBLISHED EVERY SATURDAY.

The Weekly Building News will contain all the latest items in regard to buildings in every portion of the State. As far as possible we intend to make a specialty of obtaining news in advance of contracts, particularly in country work. Architects can greatly aid us in this regard by forwarding notices of intended improvements upon which they desire bids from City Contractors. There will be no charge for any such notices published in the Weekly.

The Monthly California Architect and Building News contains several pages of illustrations in each number, embracing every description of city and country business buildings, residences, farm and school-houses, churches, suburban homes, etc. Also 28 pages of reading and other matter prepared especially on matters pertaining to the building interests.

Price of the Two Publications, $2 per Annum.

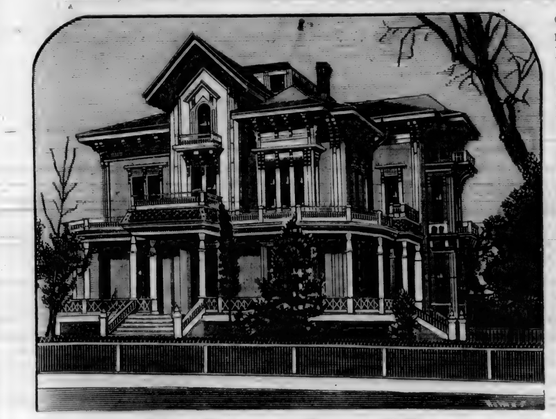
Purchasing Agency.

Connected with this office is an agency for the purchase of everything pertaining to the building interests. We do not seek to make pecuniary profit from this branch of the business. As far as possible, consistent with business principles, we will purchase from those advertising in the California Architect, and endeavor to help those that help us. But we are not bound so to do. In all cases we will seek to obtain the lowest market prices, and patrons can depend upon being furnished the best goods of the kind ordered, in the shortest space of time, and at the lowest cost.

OUR BOOK DEPARTMENT.

Manual of Industrial Drawing for Carpenters	$2 00	Amateur Mechanic's Workshop	$3 00	Essentials of Perspective	$1 50
Illustrated Drawing Book	1 00	Every Man His Own Mechanic	3 50	Modern Architectural Designs and Details	10 00
Mathematical Drawing Instruments	1 50	Handbook of Legendary Art	3 00	Detail Cottage Architecture	6 00
Drawing for Carpenters	1 75	Dwellings, Reed	3 00	Leffel's House Plans	3 00
Shavings and Saw Dust	1 50	Plumbing Appliances	1 50	Science of Carpentry	5 00
Linear Drawing	1 50	Modern House Painting	5 00	Mechanic's Geometry	5 00
Practical Draughting	1 00	Stair Building Made Easy	1 00	Artisan	5 00
Drawing for Cabinet Makers	1 50	Cabinet Maker's Companion	1 25	Artistic Homes	3 50
Handrailing and Staircasing	1 50	Manual for Furniture Men	1 00	Mechanical Drawing	1 00
Painter, Gilder, and Varnisher	1 50	Rural Architecture	1 50	American House Carpenter	5 00
Water Closets	1 00	Architecture, Horton	1 50	Building Superintendence	3 00
Sewer Gas	1 25	Wonders of Art	1 25	Builder's Companion	1 50
Steam Engine Catechism	1 00	Common Sense in Church Building	1 00	Cutting Tools	1 50
Paper Hanger's Companion	1 25	Old Homes Made New	1 50	Cottages	1 00
Builder's Guide	2 00	Hints on Household Tastes, by Eastlake	3 00	Ornamental Drawing	1 00
Cozy Homes	25	American Cottage Builder	3 50	Grimsnaw on Saws	4 00
Principles of House Drainage	1 00	The Suburban Cottage	1 50	Universal Assistant	2 50
How To Paint	1 00	Homes for the People	2 00	Limes, Cements, and Mortars	4 00
Practical Geometry	1 00	Country Homes, Woodward	1 50	Trussed Roofs, Ricker	3 00
Lumberman's Hand Book	2 00	Cottage and Farm House, Woodward	1 50	Gould's Carpentry	2 50
Lien Law	50	Suburban Houses, Woodward	1 50		
		Rural Homes, Wheeler	1 50		

Bound Volumes of California Architect and Building News, $2.50.



Front Elevation "Woodland" Home.

A "Woodland" Home.

THE plans and elevation of a "Woodland" home are well worth the attention of those desiring to build a home that will contain all the necessary requisites to make a country or suburban dwelling truly home-like and comfortable. Entering a spacious front hall, you are at once struck with its handsome appearance, a direct view being obtained of the stair hall with its winding stairs. You pass into the large parlors, arranged especially for comfort, and having superior advantages in the way of light and ventilation. Across the stair hall is shown a large sitting-room, in size 16x22, with five windows, giving ample light. Two bedrooms lead off on either side, and a passage to the dining-room. The kitchen is in close proximity to the laundry, wood-house, etc. On the second floor are seven bedrooms, all well supplied with cupboards. Messrs. Gilbert & Son, of Woodland, are the architects, and the plans shown are of only one of the numerous fine dwellings that have been built by this firm.

THE HOTEL VENDOME, SAN JOSE.

Plans and Specifications Adopted—Work to Be Begun at Once.

AT a meeting of the Hotel Vendome Directors, the plans and specifications prepared by Jacob Lenzen & Son, of 75 East Santa Clara Street, San Jose, were unanimously adopted, and by the coming week contractors will be figuring upon the work.

The Hotel Vendome will be one of the most commodious and elegant suburban hotels in the United States. It will be in the Queen Anne style, and no expense will be spared to make it in every way attractive, comfortable, and luxurious—a credit to San Jose and to the gentlemen who conceived the enterprise and are now, with commendable alacrity, carrying it into execution.

The new structure will be situated 250 feet from First Street, which it will face, and 25 feet from Vendome Avenue. It will stand somewhat back of the Maddox residence, as now situated. The latter building is to be removed to the corner of San Pedro Street and Vendome Avenue, and will be used as a club-house, after the necessary changes in both exterior and interior have been made.

The hotel will have a frontage of 254 feet. The central portion, or main body of the building, will have a depth of 210 feet, with which will be connected two wings, each 42 feet front by a depth of 120 feet. The foundation will be of brick, with pressed brick facing, and the building proper of wood. The floors will be all doubled, with mortar deafening.

The basement will be 9 feet clear, the first story 15 feet high, the second story 12 feet, third story 11 feet, attic 10 feet.

The basement will contain dining-rooms for servants, barber shop, fuel and store rooms, bakery, etc.

On the first floor will be the main entrance, 41x66 feet, in which will be located the office, grand stairway, elevator, private stairway, etc. Here, also, will be the dining-room, —x80 feet, with two wings, 30x40 feet, 30 chambers, ladies' parlor, billiard-room, reading-room, baggage-room, etc.

There will be fifty-three rooms on the second floor. Here suites can be extended to seven rooms, if desirable, and on the front nine rooms can be merged into a single suite. Here, also, will be toilets, bath-rooms, etc.

A nequal number of rooms will be on the third floor, with the same facility for suites and an equal number of toilet and bath-rooms.

In the attic there will be forty rooms.

Three towers will rise from the hotel, the central one to be 100 feet high and the others about 85 feet each.

Fire-places will be constructed in each of the principal rooms. Steam will be used to heat the corridors and for other purposes.

The grounds surrounding the hotel will be graded up to the basement, for which no digging will be required.

The stables, laundry buildings, etc., will be situated at some distance in the rear of the hotel.

Jacob Lenzen & Son will have the plans sufficiently completed in detail by Tuesday to permit contractors to make estimates upon the different portions of the work, which Mr. Lion states will be pushed forward as rapidly as possible.

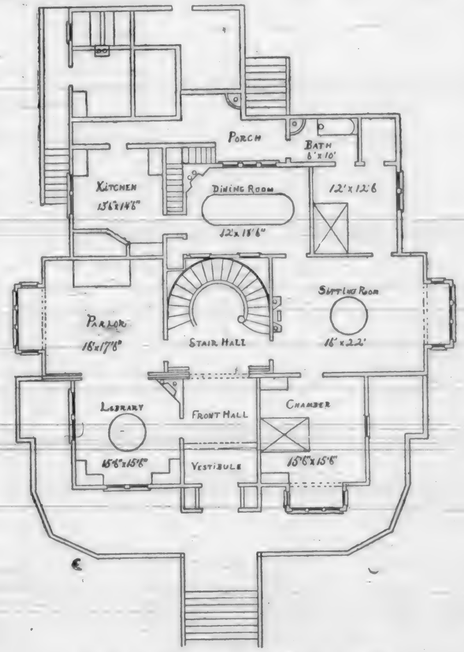
NEW WORKS JUST RECEIVED.

"MANTELS AND SIDE WALLS."

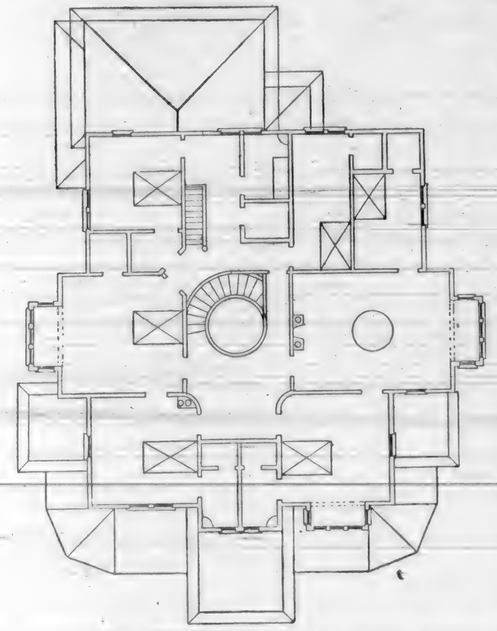
Thirty-two lithographic plates in a portfolio representing designs in the *Cheminee*, Louis XIII., and Louis XVI. styles. Also plates showing various accessories such as mirrors, decorative panels, wainscoting, clocks, etc. These plates are all by the celebrated designer, M. Prignot. Price for portfolio, $5.00.

"SHORT HISTORY OF ARCHITECTURE."

From Chas. Scribner's Sons we have received a copy of this new work by Arthur Lyman Tuckerman. The general design the author had in view was to trace the origin of each style, its characteristic points, and its connection with those which preceded and succeeded it, without introducing technical terms or any but the most important dates. All the great historical events are presented within a small compass. A fuller description will be given soon, as the book was received too late for an extended notice.



First Floor Plan "Woodland" Home.



SECOND FLOOR PLAN "WOODLAND" HOME.

Industries in Lumber.

AS San Francisco is the great maritime center of the woodlands of the Pacific Coast. it would seem to be a foregone conclusion that it should be the seat of great industries in lumber. Add to that the fact that most of the houses of the coast are of wood, and it should appear as if it ought to be overshadowing. As a matter of fact, however, some other special lines of industry surpass it in importance. The quantity of lumber consumed in California in the course of a year is about five hundred and sixty-four million feet, of which two hundred and sixty million feet come from Puget Sound. Thus very nearly two-fifths of the whole is imported. The value of the whole in the State is about eleven and a quarter millions of dollars. Of this San Francisco handles yearly three thousand million feet, worth six million dollars, all coming from the coast from Puget Sound to the Golden Gate, and employing quite a fleet of vessels in its transit. Thus far the raw material which the planing-mill, the manufacturer of doors and sashes, the producer of furniture, the manufacturer of boxes, converts into myriad forms of usefulness and many of beauty. The planing-mills of San Francisco and the manufactures of sashes, doors, and blinds, equal about six millions of dollars in value. Besides supplying lumber for house building to the city and suburbs around the bay, we export largely of doors, sashes and blinds to every port on the Pacific. The furniture industry will equal in value this year a million and a half of dollars, and what magnificent furniture we can turn out anyone may see for himself in the pavilion. Our box makers have a great field to supply. The value of the product this year will not be less than a million and a quarter dollars. There is a great increase, owing to the heavy packing of canned and dried fruit and of salmon. Cigar boxes of themselves equal in value say $250,000. We have not included cooperage stock in the value of lumber imports to San Francisco, but from the extension of our wine and beer industry the value of cooperage made in San Francisco cannot fall short of a million dollars. Carriages and wagons, of which there are some fine specimens in the fair, will equal a million dollars in value. We will make nearly a hundred thousand dollars in value of billiard goods. Our wooden-ware factories will add to the value of our industries in this line not less than two hundred thousand dollars. The totals of the leading industries noted will not be less than eleven and a half millions of dollars. The grand total of San Francisco's industries in this line will at least equal thirteen millions of dollars. The processes of manufacture, therefore, on the whole about double the value. The importance of this interest must steadily increase, and it must grow even more rapidly than the growth of the city.

California Veneers.

CALIFORNIA sycamore is a wood that is as little known as it is handsome. It has the appearance of quantities of fine vertical lines close together and generally wavy. It looks very much like the Eastern beechwood, and before its value for finishing and decorating was discovered it was used for cigar boxes. It is called buttonwood in New York. Sycamore is used principally for veneering, as it is very strong and can be cut easily. It is a very unostentatious wood, being rather fine in its markings and quiet in its shades.

For fancy decoration, panels of furniture, doors and other places where a highly marked wood is required, the redwood, laurel, sycamore and walnut are greatly used. They are usually found handsomely marked. The redwood is probably the most used, as it is not only cheap, but is very beautiful More variety can be found in this wood than in any other. The walnut is still used, but is gradually giving place to the fancier and more modern woods. The tendency nowadays is to make furniture from lighter and fancier material than formerly, and the somber, gloomy walnut, with its massive appearance, is gradually giving place to the lighter woods.

The finishing of a house is usually done by veneers, as it is cheaper and just as satisfactory as solid wood. The wood is cut into veneers of about one-eighth of an inch in thickness, and they are then planed and polished until reduced to the required dimension. In very hard woods such as the mahogany, the veneers are very thin indeed, being a thirty-second of an inch in thickness, and often thinner. The polishing is a somewhat slow and laborious job and is always performed by a skilled and special man. It is done by rubbing the wood with boiled linseed oil until it assumes a high polish. Only hard woods can be used, because others do not take a good polish, nor do they last for any length of time.

It is only during the last eight years that the finishing of houses in natural woods has come into prominence at all, and up to a very few years ago this style of interior decoration was used by few except the rich and esthetic, but of late it has sprung into a deserved prominence. When two or more woods are combined the effect is often very handsome, and the many who are using this method of finishing attest its popularity.

The wood must be cut so as to bring out the figure, or the markings of the wood, otherwise it is worthless. To do this requires great skill and knowledge of the natures of the various woods. Occasionally an apparently worthless piece of wood is found which will contain some very fine and striking markings, in which case somebody usually makes a small fortune, for the prettier the markings the more valuable the wood. The wood generally used comes from Santa Cruz. Occasionally a piece is found which will contain some perfect figure, as an animal, a head or some geometrical figure. This wood is, of course, very valuable and greatly prized.

The figuring in woods is generally attributed to the fact that the bark of a tree outgrows the interior, and then becomes wrinkled in the attempt to fit itself to the tree. The tree comes to its assistance and attempts to fill up the wrinkles, thus causing the markings. Woods that grow in well-watered soil are always most highly marked on this account.—*Wood Worker.*

"ARTISTIC HOMES."

GEO. W. MYERS has forwarded us a copy of "Artistic Homes." The price is $1.00. It contains thirty-two designs of various kinds of dwellings and is well worth the price asked.

"RECENT PRACTICE IN SANITARY DRAINAGE."

THIS is No. 93 of Van Nostrand's Science Series. The full title is, "Notes Embodying Recent Practice in the Sanitary Drainage of Buildings, with Memoranda on the Cost of Plumbing Work," by Wm. Paul Gerhard, C. E. For sale at this office. Price, 50 cents.

THE HANDSOME ILLUSTRATION OF THE NEW ST. MARY'S CATHEDRAL to be built on the corner of Van Ness Avenue and O'Farrell Street, is taken from the *Inland Architect and Builder*, of Chicago. The editors of that journal kindly furnished us with an electro of the cut, by which we are enabled to present to our readers a beautiful view of the "great cathedral" of San Francisco.

The New City Hall of San Jose.

HEREWITH is presented a view showing the front elevation of the new City Hall. This structure will be one of which San Jose may justly be proud. From the view here presented it may be seen what an imposing edifice it will be.

As seen from the engraving, which shows the north or main front, the structure will be two stories with a basement. In the center of the front will arise the clock tower, and chaste pavilions will ornament the four corners. The finish on the four sides will be similar. The windows are large, with semicircular tops, and they will give the building a light, airy appearance. The style of architecture is modern, with a blending of Grecian, presenting a solid but ornate appearance.

The edifice will be of brick. The basement, laid in the excavation already made, will be of solid masonry plastered on the outside to represent stone work. Above the basement the exterior will be pressed brick, the interlying mortar striped with black putty. The steps to the vestibule, the lower floor, and the coping will be of granite; the water tables, window sills, etc., will be of artificial stone; and the ashlars, cornice, and general trimmings will be of terra cotta. There will be appropriate projections and recesses in the sides so as to avoid sameness and give a symmetrical outline to the whole.

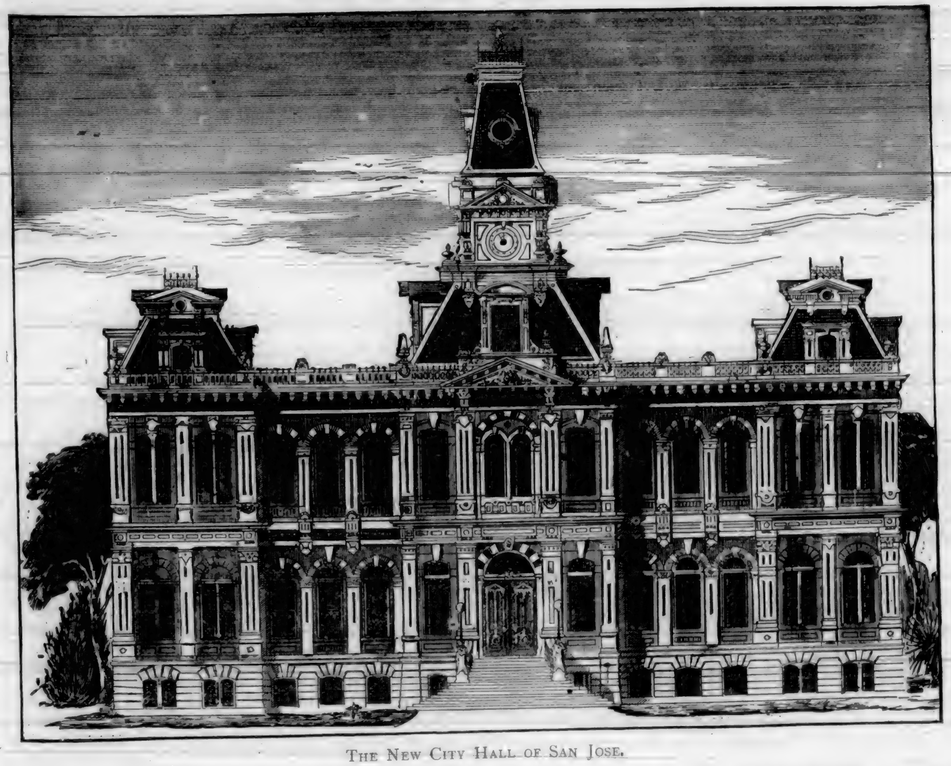
The inside finish is in keeping with the exterior. Care has been taken to secure the very best means of lighting, arrangements having been made for either gas or electricity; also for supplying water throughout the building, and for draining. The heating apparatus, likewise, has been carefully attended to, and will be either by steam or hot-water radiation.

The basement will be provided with a passage through the center for the accommodation of carts bringing coal and other supplies, and the police carriage. In the basement will be the offices for the police, the jail, and rooms for the storage of supplies, and the furnaces and engines for the use of the building. The rooms in the basement will all be ten feet six inches clear in height, and the walls will present a brick finish.

The first story presents a spacious vestibule and entrance facing Market Street, looking northward, and a side entrance facing San Antonio Street. The front entrance is 32x34 feet, opening into a lobby 18x44 feet, which connects with two stair halls, 20x50 feet. On the west side of the main entrance is the Mayor's office, and two rooms for the Treasurer. Back of these will be the witness room, connecting with the Police Court room, 40x40 feet. On the east side will be the office of the City Attorney, of the School Superintendent, and, connecting with the latter, the room 20x30 feet for the Board of Education; also a jury room. All the rooms in the first story are to be plastered and will be 21 feet 6 inches high.

Two large stairways conduct from the lower to the second story. In the front part of this story, under the main tower, will be the Council Chamber, 32x84 feet. On this floor will be the offices for the City Assessor and Clerk, the City Engineer, a reading-room, and a large hall, 30x40 feet, for the Free Public Library. The rooms in the second story are to be 24 feet clear.

Should there be a demand for the space the pavilions may each be fitted up with one or more comfortable rooms. Likewise in the tower several fine rooms might be arranged. The room under the belfry, and just over the clock, provided with four oriel windows, will make a fine lookout, commanding a view of the whole city and the surrounding country. A stairway is provided for the tower to ascend to the upper deck.



THE NEW CITY HALL OF SAN JOSE.

The main building will be 132 feet long, facing Market Street northward, and 93 feet deep. The height of the main building will be 60 feet, and that of the tower to the upper deck 112 feet.

The awards for the construction are as follows: F. Altman, cast-iron work, $1,887; F. Kuchenbeiser, wrought-iron, $5,890; Coombs, Blanchard & O'Neil, granite, $5,150; P. R. Wells, masonry, carpentry, painting, plastering, and plumbing, $117,000. Total contracts let, $129,927. Estimated costs of other works, vaults, safes, etc., $3,000; furnaces for heating, $2,000; extra plumbing for electric apparatus, $250; elevator, $250. To these figures add the allowances for the architect's services, 3 per cent, and the total cost of the building will be $139,489.

For the details of this description, as well as for the use of the engraving, the CALIFORNIA ARCHITECT returns due acknowledgment to the architect, Theodore Lenzen, of San Jose.

The Mechanics' Fair Exhibition.

THE fair lately held in this city is justly regarded as the most successful that the Mechanics' Institute has ever conducted. It is impossible to give a complete account of all the exhibits, but such of those more directly connected with the interests of this Journal are here noted.

CUT AND ORNAMENTAL GLASS.

John Mallon, of 17 and 19 Fremont Street, presented a beautiful variety of cut and ornamental glass. The designs of the latter were more than usually attractive, and many were the comments upon the push of business ability shown by Mr. Mallon in introducing the artistic designs presented.

BRASS BEDSTEADS.

E. H. Marwedel, of 541 Market Street, had a full assortment of brass bedsteads and cornice poles. Each time we passed remarks were overheard praising the general neatness and appearance of the old but new-fashioned bedsteads, with many wishes for the fashion to change again in their favor.

TOWNSEND'S "HOUSEHOLD TREASURE."

C. H. Townsend, of 440 Fifth Street, had samples of his improved kitchen table, yclept the household treasure. Convenient receptacles are found for all the various manipulating articles most in use by the thrifty housewife.

MAHONEY BROS.' RAILROAD CARS.

These gentlemen should be awarded a gold medal for the beautiful car exhibited, to be used on the Powell Street Railroad. For excellence of material, perfect character of the work employed, artistic arrangement of the various accessories needed, these cars stand the peer of any in use on any cable line in the United States. Mr. Thomas Downing, by his artistic skill as a painter, has done his share towards the achieved success of these cars. Mahoney Bros. deserve a fitting recognition at the hands of the workingmen of San Francisco, for endeavoring to build in our midst a factory that will give employment to scores of the wage workers of the city.

INTERIOR DECORATIONS.

A fine assortment of wall paper, linerusta—walton, etc., for interior decorations was shown by G. W. Clark & Co., of 645 Market Street. Some of the patterns were very beautiful, and owners will do well to examine the same.

KRELING & SONS.

One of the finest displays in the fair was made by this firm. The furniture and bric-a-brac ornaments commanded the attention of observers, while the richness of the designs of the mantels and the good work shown in every little detail, proclaimed that someone was at the head of the firm who made a study of turning out only designs and material of the very finest workmanship.

MAMMOTH STICK OF LUMBER.

Renton, Holmes & Co. had on exhibition the largest stick of timber ever sawed in a mill. It was 20 by 20 inches in size, 151 feet long, and contained 5,033⅓ feet. But very few knots could be seen throughout the whole length of the stick.

FIRE HOSE.

W. T. Y. Schenck exhibited all grades of rubber and cotton hose, and samples of all the paraphernalia incident to the complete equipment of a fire department.

ABRAHAMSON'S PATENT VENTILATOR.

Mr. Abrahamson personally attended to his own ventilators, and explained to the thousands who inquired the working of his patents. He had models of old and new windows, and showed how the ventilators could be adapted to each; also the method of placing them over doors. For full particulars of Mr. Abrahamson's inventions, our readers are referred to page vii of this issue.

STOVES, RANGES, ETC.

George H. Tay & Co. deserve more than ordinary mention for the excellent display of articles in their line. One stove should be particularly noticed. It combines all the features of a handsome parlor ornament with the utility of a cooking stove. Placed in a dining-room, it serves the purpose of heating, and can be used to boil tea, coffee, etc., without in the least affecting the beautiful design. Messrs. Tay & Co. also make a specialty of the hot-water system of heating houses. They should be consulted by owners who desire to have houses thoroughly heated at a minimum expense.

FINE BUTTS AND LOCKS.

Frank P. Latson had a beautiful exhibit of fine bronze hardware, such as locks, butts, etc. All the higher grades were represented, and called for much praise from those interested.

SCHUSTER BROS.

These gentlemen tried to outdo their competitors in having a large show of stoves, ranges, granite ware, etc. In the latter item the ladies seemed particularly interested.

SIMOND'S SAWS.

John Simonds, of 511 Mission Street, exhibited a very large and beautifully arranged assortment of saws of every conceivable design.

LUMBER.

Harris & Jones, 838 Bryant Street, showed the immense throng what California can do in the way of lumber. Their display of sugar pine, yellow pine, etc., attracted much attention.

LIGHTNING SAWS.

Union Saw Co., represented by J. F. Wyman, presented a very attractive arrangement of saws of every conceivable design. Their improved lightning cross-cut saws were the subject of much comment from those who go down in the woods to earn their daily bread.

SUGAR PINE.

Towles Bros., of Nevada County, had two sections of a tree, the first being cut 3 feet above ground, about 12 inches thick, and over five feet in diameter. Another section from the same tree, 161 feet from the ground, was 4 feet 6 inches in diameter. They were deservedly worthy of the attention bestowed upon them.

SONOMA'S LARGE TIMBER.

From the Big Bottom Mill, Sonoma County, a section of a tree was shown over seven feet in diameter.

SAN MATEO'S GRAND LUMBER.

Hanson & Co. take the palm on the exhibit of fine lumber from La Honda, San Mateo County. One plank shown was 13 feet long, 50½ inches wide and 3 inches thick. It was perfectly clear, not a knot in its whole length. Also another piece dressed on all sides and edges, 12 feet long, 50 inches wide, 1½ inches thick, absolutely free from cracks or knots.

CALIFORNIA WIRE WORKS.

"A magnificient exhibition of one of the industries of the coast." Such was the gist of the remarks made by thousands upon viewing the grand display by the above company. Their wire cables attracted unusual attention, from the great size and exquisite workmanship. Crestings, fences, finials were also in abundance.

HILLS' PATENT BLINDS.

It is but a short time since these blinds were manufactured in this city, yet by the persevering energy of Mr. Hindes this industry is growing of colossal proportions. The first factory was started "Los Angeles Way." That was entirely inadequate to do the work required. So branch after branch was established in various parts of the State, until Hill's Patent Blinds have become household words among builders. Mr. Hindes has associated with him Mr. Murray, a man of practical ideas, who insists that his workmen perform every little detail of the various parts of the work with the utmost exactness. These blinds have been indorsed by all the leading architects of the coast.

HUMBOLDT COUNTY.

Just a slice off a redwood tree, but oh how beautiful! Over four feet in diameter, with part of the bark left on for a border, and polished so one's face could be distinctly seen. The specimens of redwood shown were simply grand.

BUNDY RADIATORS.

"Whew, how hot! and where does all this heat come from? Surely not from that little furnace." Many were the remarks the substance of which is embodied in the above. The new furnaces now being introduced by Mr. Harvey are giving complete satisfaction and are a wonder in two particulars—economy of space and the small amount of fuel needed. The radiators are of a new pattern and are very handsome in appearance. Any inquiry in regard to heating apparatus will be answered by addressing C. D. Harvey, 30 New Montgomery Street.

REDWOOD.

What a Worker in all Kinds of Wood Has to Say about California's Great Production—An Experience of Fifty Years.

EDITOR *Wood and Iron:* In response to your question, of "What do you know about redwood?" I will state a few facts, which all acquainted with the wood, I am sure will certify to, viz.: That it stands *first* for general use of all woods known. None are perfect in all requirements, but the redwood certainly comes nearer to perfection than any other known in our day; this I, after fifty years' practical experience, can certify to. There are the Brazilian and Mexican rosewoods—they can never be depended upon for holding together with glue; they are full of oil—destroy the oil and you destroy the beauty of the wood. *Per contra*, no wood in the world holds better than our redwood when glued. There is the St. Domingo, the Cuban, the Mexican, and the Honduras mahogany, all beautiful woods, but for general use and for beauty they pale before our redwood. There is the Spanish cedar, I suppose a member of the mahogany family; it is full of gum; no matter how much polish may be put upon it, the gum forces its way through, and it is impossible to keep it smooth. No such trouble affects our redwood. I have pieces that were polished years ago, have been kicked about the shop, sometimes outside, sometimes in, but the polish is there—no gum exudes through that. There is our own beautiful walnut, a melancholy wood, carrying one back to the funeral of his grandfather; a room fitted up with it looks more like a morgue than a dwelling—nothing cheerful. But mark! I have an order for walnut doors, we will say; the order is imperative; they must neither warp, twist, nor shrink; they must keep their place in all weathers, at all stations of the mercury in Fahrenheit they must not move. Do I trust the walnut? No, no; I cut redwood into segments, make a redwood door, and put a thin coat of our walnut *on the outside*. The redwood is the only wood that will fill the bill required above.

In connection with this, I would say that I have tried white pine (Canadian), sugar pine, Port Orford cedars, and other woods; none come up to the mark like our redwood. There is the butternut, the chestnut, and other woods of the walnut family—they are used for their excellence in holding glue, hardly ever seen upon the outside. The walnut and the butternut produce a burl, but far inferior in quality, in size, or in beauty to the redwood burl. I have some in my possession ten feet long. Not even the far-famed burls of the Danube, which, when landed in America, bring almost their own weight in gold, exceed in beauty the burls of our beautiful redwoods. There is the pine, the whitewood, the basswood, and others of the whitewood family, which can be used for certain purposes only. Our redwood fills all their bills, and for beauty and the quality of keeping its place, it allows of not even a comparison, it is so far ahead.

Then come our oaks—the live oak of Florida, the white, the black, the red of the Eastern States and Canada—not one of them equals the redwoods for general utility or beauty. The white oak cracks by seasoning, and cannot be depended upon until stacked up for years; the red oak you can blow through a piece ten feet long. Our redwoods have none of those failings. Then there is the ash. After being for a few months in use, the grain will rise and sliver, especially if it is knocked about a little. It also produces a burl, but far, far inferior to our majestic redwood.

But if I do not tire your patience, I would like to contrast the treatment of those woods that are turned out as lumber in the East and in Canada with the treatment given our redwoods: In the first place, they are cut down in the forest when the *sap is down*, in cold weather. They are hauled to the water, in which they are allowed to swim for months, then carefully sawed, carefully piled; strips are nailed upon the ends of the better boards to preserve them from splitting; they are well and carefully treated; they are left in the water until the little sap left in them is thoroughly washed out. Well do they understand how to make the best of what they have.

Now for the contrast. The redwood is felled at any time, mostly when the sap is running and the tree full of life. It is hauled to the mill directly, where, if handy, a vessel lays; piece by piece, as fast as sawed, it is loaded close together in the hold—in the forest to-day, to-morrow at sea in the shape of lumber. Arrived in port, it is sold immediately, or perhaps ordered before it was cut; loaded upon wagons, and built into a house or barn almost instantly. Now it goes there full of sap or life; that dies, decays and rots in the lumber. It is brutalized, murdered, abused most shamefully—not through ignorance, for all mechanics should know that no well-made lumber is allowed to retain its sap when put to practical use.

Compare this murderous abuse of our redwood with the care bestowed upon the others, and you will wonder no longer that its beauties have been passed over; it being plenty, it was made to be abused; it being a *home product*, it was voted no good; it being cheap, and no import duties to pay, of course then it could not be of any value.

Now, gentlemen in the lumber business, treat it better; cut at the proper season; dry and season in the proper manner; give it a little care and attention, and it will well repay the trouble. Let some wholesome law be enacted for its protection, at least from vandals; and know that if we stand first in the production of the precious metals, first in cereals, and first in climate, we also stand first in the most beautiful woods on the face of mother earth—the largest, the highest, and the most beautiful. But even the most beautiful has been destroyed through ignorance.

Now a word to the finishers or varnishers that do not understand the treatment of redwood. Would you daub a piece of Danubian or, as it is called, French walnut, with oil? You know you would ruin it, destroy its grain and tints forever. Well, the redwood requires the same care as that, no more, and then you can preserve its beauties for many, many years. The following recipe is one at least that preserves its color and tints for years, for the truth of which I can show anyone interested. Use as near as may be the following proportions:—

Take one quart spirits of turpentine.
Add one pound corn starch.
Add one-fourth pound burnt sienna.
Add one tablespoonful *raw* linseed oil.
Add one tablespoonful brown japan.

Mix thoroughly, apply with a brush; let it stand say fifteen minutes; rub all off you can with fine shavings or a soft rag; then let it stand at least twenty-four hours, that it may sink into and *harden* the fibers of the wood; forty-eight hours is better. Afterward apply two coats of white shellac; rub down well with fine flint paper; then put on from two to five coats of best polishing varnish, as the openness of the grain requires; after it is well dried rub with water and pumice-stone ground very fine; stand a day to dry; after being washed and wiped clean with chamois leather then rub with water and rotten stone; wash as before; lay it one side to dry; clean and rub with olive oil until dry. If you have been careful to fill up all the pores perfectly you have a polished wood that surpasses all others; if you have not the pores or grains perfectly filled, of course you must apply more rubbing with pumice-stone and more varnishing until the object is attained; and, friend, you would have to do the same with any other wood. To add weight to what is told in these few lines, I would say that when such architects and artists as Percy & Hamilton, Wm. F. Smith, and others, have indorsed the redwood and its beauties for years, and have worked wonders in bringing it into notice, for mantels, wainscoting, doors, casings, and other inside decorations not necessary to detail, giants in their professions, they have used their beautiful art in connection with their refined taste to render our redwood where it now stands, "Excelsior." I have sent, some twenty months ago, by ship *Santa Clara*, to New York, thence by rail to Brattleboro, Vermont, to the order of Mr. Brooks, enough to finish two large rooms. This spring I have made and shipped to New York, per order of Mr. DeWitt, mantels, desk for library, door for library, library table, and all the casing for doors and windows and other mouldings required in library and bedroom. I have sold samples to every State in the Union, and feel confident that it is but a question of time when pianos, inside decorations of houses, banks, offices, etc., will be made of our glorious redwood.

Now, Mr. Editor, I have given you *jack-plane* facts and hints, I have no wish to be positive nor arbitrary; there are many others, if asked, will add their testimony to the many virtues of our glorious redwood; and if any should have a doubt or a fear upon the question, let him or her come to 213 Mission Street, and judge for themselves. I will also *give* the frugal, doubting tourist from the East, a piece at any time, that he may look upon and admire, free *gratis*, and [illegible] up that we here are the most blessed and fortunate people upon earth, and first in all—gold, silver, wheat, and lumber.

Some little time ago I was showing a gentleman and lady from the vicinity of Buffalo, New York, some specimens of the beautiful wood, when he said, "Really, friend, taking your climate, your minerals, your fruit, vegetables and cereals, and this really wonderful wood, I must own and regret that the Pilgrim Fathers landed upon the wrong side of the continent."—*Wood and Iron.*

A New California Industry—Inyo Dolomite Marble.

Mill and Quarries, 1887.

AMONG the many evidences of the great natural wealth of California, but few have attracted more attention than the splendid exhibition, in the late Mechanics' Fair, of the marble extracted from the quarries in Inyo County, Cal. And in introducing a new article of commerce, it may be expected, and it is but right and proper, that its claims to superiority should be made known, and wherein it differs from similar material in the market.

The great objection to marble is the tendency to change and decay when exposed to the atmosphere, losing every attraction, and in a few years well-nigh destroyed, which is the main cause, no doubt, of so much Scotch granite being imported into this country for our cemeteries.

In offering you our Inyo Dolomite Marble, we offer you a material that will stand the test of time—equal if not better than granite, which, geology says, "is the most durable stone of primary formation"—for this marble is less affected by the carbonic acid and other gases in the atmosphere than even granite. Italian and Vermont marble are composed of lime and carbonic acid, with some silica, and the gases in the atmosphere acting on the marble, set the carbonic acid free, which destroys the marble. The Inyo Dolomite Marble is composed of carbonate of lime and carbonate of magnesia, and, therefore, these gases have comparatively no injurious effect. The juice of the citrus fruits and the acid in wine will destroy the polish on ordinary marble, but will not damage our Dolomite Marble. This liability or certainty of ordinary marbles receiving injury from causes enumerated, and becoming an offense to people of nice taste, where a blemish or defect would destroy their value in an important sense, has changed marble for wood, as in case of mantels and grate surroundings, where wood cannot be said to be really appropriate or in good keeping, and robbed even fine furniture, to some considerable extent, of a most fit and ornamental covering, which, we believe, will begin to be re-instated in both cases, when it is known there is a marble called "The Inyo Dolomite," that will keep its deep and charming polish and rich luster without blemish, against all these well-known causes. And we believe, in view of all these tests, especially the effect our atmosphere has on imported marbles, as seen in our cemeteries, that the *native stone* should be altogether preferred. But so far as climatic influences may have to do with crystallization—though not an accepted scientific theory—we believe if Italian skies are anywhere surpassed in softness and beauty, and in perpetual clearness of atmosphere, it is around that wonderful sheet of water called Owen's Lake. And one thing we can say *and prove*, that no marble was ever found under Italian skies, or in Afric formation, having a more perfect, a finer and clearer crystallization, than this *to-be-famous* Inyo Dolomite Marble, now exposed in solid layers and in place at the base of the old Inyos, near the head of that body of mineral water. But they say it is harder to work. True, it is more solid and compact, but then you have something enduring which will not deteriorate. It is harder to make a knife of steel than of iron, but who wants an iron knife? The difference in labor is trifling, compared to the difference in real enduring worth. Another thing is important: Our marble is free from flint, which cannot be said of the Vermont and Italian; and it will be shown to dealers and consumers that the difference in cost of working, even though trifling, will not be figured to their disadvantage.

A comparative test of the pressure or weight required on fair samples (as believed) of the Vermont, Italian, and Inyo marbles, to crush or destroy the grains, was recently made by Mr. Emmet Rixford, a very intelligent student in the senior class of the University of California, under the supervision of Professor Hesse, with results as follows:—

Vermont	an inch cube crushed at	6,000	lbs.	pressure.
Italian	"	"	"	10,000 "
Inyo	"	"	"	26,900 "

This extraordinary solidity or compactness of the Inyo marble accounts for its not absorbing water to any appreciable extent in calculation; also accounts, in a great measure, for its resistance of atmospheric influences, and the action of even the powerful acids. Air and water are the great change workers. If this marble will not absorb water, and atmospheric agencies cannot enter it, or impinge upon it, actual use will undoubtedly confirm these positive scientific determinations, and, therefore, it will be conclusive to every thoughtful and logical mind that there is really *no experiment* in bringing this marble into immediate use.

If the ancient pride in fine marbles and its ideal and architectural uses should be revived, Inyo Marble Quarries can supply the demand. Dealers and consumers who are loyal to the best interests of the State, will at least examine our marble, and will not be deterred by prejudicial remarks from any quarter; that is all we ask, which we are fully confident will result in business, and if this State enterprise is encouraged on its *real merit*, it should, ere long, save a million a year to our commonwealth, that must otherwise go out of the State to pay for an imported article of no finer appearance, to say the least, and as to durability and permanent beauty, bearing no comparison to our own Inyo marble.

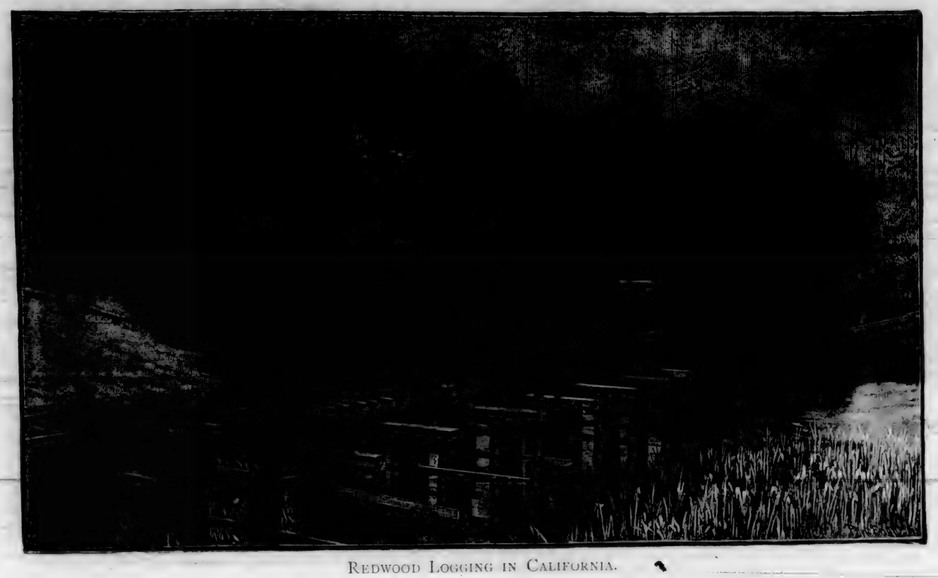
We do not enter the field to provoke competition; we come before the public with a valuable stone, taken from our own mountain-side. We ask no favor beyond its real merit, as compared with similar outside products. We simply ask your patronage, to enable us to open up a great treasure-house of our State, which has been too long locked up. And with your encouragement and patronage, *this California enterprise* can be made as great a public benefactor to the State, and secure as important results as have ever been secured to any State or people by the production of a similar material or article of commerce in any part of the world.

The Inyo Marble Company of California.

Outside Paints.

VARIOUS opinions are expressed by members of the trade as to the use of linseed oil and zinc in outside paints. Those who favor the mixture of zinc with lead claim that when zinc is thus blended, its characteristics of drying hard, lacking body and having a tendency to chip, are not apparent in such paint. Zinc has certainly the quality of being most free from acid, and acid, as all are aware, saponifies oil, on the presence of which depends the vitality of paint. A Mobile painter who mostly uses lead and oil for outside work makes it a point to get only the best lead and ripest oil, but it will not stand in that climate more than three years except when used for repainting, when it lasts somewhat longer. Some painters use equal parts of white lead and zinc. A painter who aims mainly at durability says that he primes with pure lead, and top-coats with two parts of lead and one part American zinc. Another painter makes a still more free use of zinc, using a mixture of two-thirds zinc and one part lead to heighten weather-proof qualities; this advantage, in his view, offsetting the lesser opacity, and less covering quality of zinc as compared with lead. A Southern painter writes in favor of a mixture of one-third zinc and two-thirds white lead. He has also used with satisfaction for outside work a paint made up of one-half zinc and one-half whiting. A long-experienced painter expresses a preference for pure white lead and oil, and deprecates the mixture of zinc and lead. He uses boiled oil, and submits the following formula, which he frequently carries out: First coat of pure lead and boiled oil; second coat of lead with half-boiled oil and turps; third coat lead and boiled oil. —*Sel.*

A fine stick of timber was brought down to Seattle, W. T., the other day to be made into a mast. The piece of timber is 86 feet long and will be 30 inches in diameter at the deck, which is 20 feet from the base; 17 inches will be the diameter at the smaller end. It is without a knot or blemish and contains 5,504 feet. The stock cost $15 a thousand at the camp and will be worth $175 when it is ready for the vessel.



Redwood Logging in California.

Redwood and Its Future.

THE operations of W. Cutten, who has gone East as a representative of the redwood lumber companies of Humboldt, Mendocino and Siskiyou, are, of course, of interest; but it may be questioned whether his object and the object of his constituents are well considered. He proposes to place on the Eastern market redwood in large quantities and at low prices, so as to tempt people to build houses of it instead of pine or hardwood. We do not believe California can spare redwood for any such purpose as that.

It must be remembered that the area occupied by the Sequoia sempervirens, or true redwood, is limited. It is found in groves of moderate extent in Santa Cruz and San Mateo Counties; it is fairly abundant in Mendocino and Humboldt Counties; there are groves of it in Siskiyou and Trinity, and it is found to some extent further north. But for commercial purposes, it may be said to be found exclusively in Mendocino and Humboldt. The redwood that goes to market from forests outside of these counties cuts no figure in the lumber market. Now, large as these counties look on the map, their five million acres are a very small tract indeed, if they are expected to furnish much of the building timber for the Eastern States. It would not take long to exhaust them, and, as is known, though young shoots do spring from the stumps of redwood trees which have been cut down, their growth is so slow that the tree may be practically said not to reproduce itself.

California cannot certainly afford to supply the Eastern States with redwood to build houses at anything like present prices. In a very little while our whole output will be needed for finishing work, decorations, furniture and other superior uses. Redwood is destined to take the place to a considerable extent of mahogany, black walnut, bird's-eye maple, cherry and oak. It is as handsome as any of these, takes a fine polish, is durable and shrinks less than any other soft wood. Ever since rosewood went out of use in consequence of the extinction of the supply, house decorators have been at their wit's end to find a substitute, and they have been driven to fall back on mahogany, which is growing scarcer year by year in consequence of the increased demand. Black walnut can never be made "dressy;" the cherry and the bird's-eye maple do not yield large planks; oak looks baronial, but is somber for any room except a dining-room. Redwood is suited for any kind of decoration. It makes fine furniture, and for mantels and wainscots it is equal to the handsomest woods of Australia, which are so scarce and so dear. It is a mere question of time when the East and Europe will realize its possibilities, and then it will sell not by the thousand feet, like pine, but by the ton, like mahogany.

In the old houses of the merchant princes of New York, built in the last century, you will still see dining-rooms of solid mahogany. The table is a solid slab of mahogany, with massive mahogany legs; the chairs are mahogany; the sideboard is the same, and even the massive folding-doors, which connect with the library, and the great door from the staircase, are of solid mahogany, worth almost its weight in silver. There was no veneer in those days. Furniture dealers are appalled when they witness such extravagance. But the furniture-maker of the future, when he comes here to pick up a few tons of redwood to complete the decorations of the drawing-room of some Eastern palace, will be far more amazed when he perceives that there was a time here when we built our houses and our stables of redwood, and even paved our sidewalks with the precious wood.

Grates, Mantelpieces, Tiling, etc., etc.

THE EXHIBIT OF W. W. MONTAGUE & CO.

THE house of W. W. Montague & Co., Market Street, had without doubt the finest exhibition at the fair. This was on the gallery over the entrance, and occupied quite a large space. It consisted of the latest and most beautiful designs in grates and mantelpieces, with the usual accessories in very handsomely wrought brass, etc. Of these there were a large number exhibited, all differing in design, but all strictly original, and so much the more attractive on this account. In tiling there was an equally good showing, the patterns in this being very unique. The whole exhibit was brilliantly lighted up, and gazing at it one at once realized the fact that it was an art exhibit. Of course to make such an exhibit the house of W. W. Montague & Co. possessed the best facilities. It can take what is required from its stock and never miss them. Each piece shown, however, was representative of a beautiful idea skillfully wrought, and it is therefore not to be wondered at that the display excited far more than ordinary attention. Notwithstanding the beauty of the articles, they are placed reasonably in price, and this is certainly an added merit. This house, in fact, can sell reasonably, it sells so largely, and its expenses are so moderate proportionately. It certainly to-day, in the above, as in its other lines, stoves, tinware, etc., is recognized as the leading house of San Francisco and the coast. In connection with it the following sketch will prove interesting:

This house was founded just seven years after the year of the Argonauts, 1849. The city differed widely then from to-day. Fourth and Market was about the limit one way, Stockton the other, while North Beach was the fashionable quarter to a certain extent, although Rincon Hill disputed the sway. There

were many vacant lots, too, between the center and Fourth Street. Oakland was certainly not then the Athens of the Pacific, but a straggling, illy-built village, with which communication was uncertain. Steamer day was an important fact, and was looked for anxiously by merchants, for beyond the fact of letters and intelligence from the outside world, the news and invoices received often raised or lowered market rates. The Vigilantes, too, were engaged in summary reforms. Mining, of course, was the main industry. Credit from steamer day to steamer day was accounted a great accommodation, and so it was when we remember the unstable character of things. Men were always on the move, and not having usually any family, they went where chance called. In these unsettled times it was a risk to start a house, expenses were so enormous and salaries so high. Of course good prices were obtained, but still the high pressure of everything required business men to be of rare ability to hold out long, money and everything else being taken into consideration. Messrs. Locke and Montague were the original founders.

Mr. S. M. Locke dying in 1876, the name was changed to the present style. The old firm occupied the building Nos. 406 and 408 Battery Street. Proving too small for an increased trade, in 1883 a removal was made to Nos. 110, 112, and 114 Battery Street, where subsequently an additional frontage of 145 feet was added to the already large stores. The necessities of greatly enhanced trade compelled still another removal, and the firm had the handsome building Nos. 309 to 317 Market Street, erected especially for it, into which it moved in December, 1883. The new building is 90x137½ feet, six stories high, with a water and damp-proof basement, giving over 70,000 feet of floor surface, every inch of which is required in the various details of business. This great space is crowded with an enormous stock of goods, conveniently arranged, and embracing every known article in the many different lines. The firm manufactures many articles, all of which are noticeable for finish, durability, quality, and workmanship. In 1883 Montague & Co. received the grand prize medal of the Mechanics' Institute for their artistic and superior exhibition of mantels, tiles, and grates, and this was followed in after years by other medals. The growth of this firm is only, in fact, paralleled by the growth of the city and State. Just as population increased so did its business. It made a point of meeting the demand for necessaries by furnishing these of superior make and at reasonable charge. It has always been the friend of home industry, and in stoves and ranges made a great endeavor for a home industry, but the time for that had not come. The demand out here was too limited, and the expense was too great. Eastern houses fill a demand ten times greater, so, of course, could undersell. In fact, out here the demand would scarce pay for the patterns for a first-class store. If a firm like this, with channels of trade all over the coast, found difficulty, we may be very sure the time was too early for such an experiment. It now has the agency for the best Eastern articles, but stoves and ranges, however, embrace only one department of its stock. This includes tiling of all kinds, tin plate, sheet iron, iron pipe, house furnishing hardware, plain, Japanned, and stamped tinware, etc. Its standing naturally commends it to Eastern manufacturers of prominence, and they are anxious for it to accept their agencies. We have not a doubt it refuses many agencies. What it offers we may certainly conclude are standard. Its immense business now enables it to sell reasonably, and this it certainly does. The fact that it has such a business shows that it satisfies customers. By its reasonable expense, too, in proportion, not much has to be added to first cost of goods.

A great house is that of W. W. Montague & Co., with a trade as wide as the means of communication to and from this city will admit, extending north and south, far to the east, and across the ocean to the Pacific Islands, and to China and Japan.

The house certainly has unequaled facilities to offer, and has made strenuous efforts to promote home industry, handling, where it possibly could, our own manufactures. Its present position has been built up solely by enterprise, and the offering of really suitable and serviceable articles of every-day requirements at such prices as placed them within the reach of all. We cordially commend it to our many readers.

DARKENING ROOMS.—People should avoid completely excluding light for any length of time from rooms that have been finished in oil color, as the paint will then be apt to take a yellowish tinge.

COUNTRY
BUILDING INTELLIGENCE

We earnestly desire the co-operation of country editors and mechanics generally to this department of our Journal. Forward us all the building news connected with your different localities. Architects should also notify us of "plans to figure on." No charge is made for such notices. Direct letters to office of this Journal, 240 Montgomery St.

Bakersfield.

O. Mattison will build a two-story brick building at a cost of about $12,000.

A large hotel is contemplated. Address Hirschfeld Bros. It will cost about $40,000.

Chico.

A number of prominent citizens have been canvassing the city for contributions to build a new hotel. The citizens are to raise $20,000 and donate a site for the building, and a gentleman from San Francisco will furnish $80,000 and proceed with the building. Fifteen thousand dollars was raised yesterday. William Earll, F. W. Burnham, F. C. Lusk, and Mayor Barnard are the prime movers in the undertaking.

Los Angeles.

THE MAIN STREET HOTEL.—Proposals for the excavation of the lot on the corner of Tenth and Main Streets, where the mammoth hotel is to be built, will be opened and the contract will be let shortly afterward. Mr. Denker, of Hammel & Denker, is in the East studying the designs of the hotels there, and upon his return plans will be drawn for the hotel, and the construction will commence shortly after.

Lake Tahoe.

Architect M. J. Curtis and D. Kaiser, of Carson, are at Sugar Point, Lake Tahoe. Mr. Curtis has the contract to build the new hotel at that point for Captain Lapham, and Mr. Kaiser will be the landlord. The hotel will be 34x120 feet and three stories high; also there will be built this fall an annex, a saloon 24x36 and six five-room cottages. The whole to cost $35,000.

Oakland, Alameda, and Vicinity.

D. C. Scanlon is building three cottages on Hobart Street, to cost $2,000 each.

D. C. Scanlon is also building two cottages for Mrs. J. M. Jones, on Jones Street, to cost $1,800 each.

D. C. Scanlon is making $1,000 worth of improvements upon the place of J. T. Gardiner.

W. T. Veitch will shortly begin a $4,500 house for Mrs. Moore.

Scanlon & Gearn will shortly begin three cottages on Hobart Street, to cost $2,000 each.

J. C. Wilson, Councilman from the Second Ward, is building five cottages on Hobart Street, to cost $1,800 each.

The total cost of building in this quarter is $33,600.

THE SATHER BUILDING.

The contracts for the Sather building on Washington Street, adjoining the Wilson House, have been let. The Judson Manufacturing Company has received the contract for the iron work, at $725. Knight & Littlefield have the carpenter work, at $10,373. The Remillard Brick Company have the contract for the brick work, at $3,745. The total is $14,843. The Sather building is well under way.

OAKLAND BUILDINGS.

The Davis Block, on the corner of Washington and Eleventh Streets, is being pushed rapidly forward, and the walls of the first story are up. The framing of the first story has been put in and the cellar has been completed. The undressed stone facings are being put in on either side of the entrance to the upper stories, the whole making a very pretty combination.

It is understood that James de Fremery is having plans drawn for a four-story building on Washington Street.

Dr. J. M. Young is building two cottages on Park Avenue, near Hollis Street, to cost $1,000 each. Robert Jackson is the contractor.

Goodrich & Newlon, of Oakland, are drawing plans for a smelter, etc., for the Crittenden Smelting, Mining, and Milling Co., of Pima County, Arizona. Total cost, $69,000.

W. T. Veitch is refitting the stores 909 and 911 Broadway. George W. Henderson is doing the moving and the iron work. The cost will be $4,000.

EAST OAKLAND BUILDINGS.

A house is being built on Sixth Avenue, between East Fourteenth and East Fifteenth Streets.

F. A. Brown is building a cottage on Eighth Avenue, between East Fifteenth and East Sixteenth Streets, for W. C. Orcutt. The contract price is $2,060.

Charles J. Gaillard is building a cottage for W. G. Reese on East Twentieth Street, between Seventh and Eighth Avenues, to cost $1,550.

S. T. Higgins & Sons are building for Mrs. M. C. Littlejohns a cottage on Tenth Avenue between East Twenty-fourth and East Twenty-fifth Streets, to cost $1,671.

The East Oakland Methodists intend building a church on Eighth Avenue and Seventeenth Street soon.

OUTSIDE THE CITY.

P. S Glasford is having a $1,700 cottage built on the Hillegas Tract, Berkeley, by C. R. Lord.

J. S. Greenleaf is having a house built by Woodhouse & Sandy at Klinknerville, to cost $2,300.

Knowles & Wetmore will build for L. Georges a house at Fruit Vale, to cost $2,700. J. J. & T. D. Newsom are the architects.

J. B. Cogswell has agreed to erect a house for Mrs. H. Gross in Berkeley to cost $3,100. Percy & Hamilton are the architects.

Goodrich & Newlon have received orders from M. B. Strelinger to advertise for bids on his house to be erected in Berkeley.

A. H. Broad has agreed to do the carpenter work on a building for A. Carlisle, on the corner of Vine and Spring Streets, Berkeley. The contract price is $2,720.

Petaluma.

A planing mill is being erected on the corner of C and Second Streets.

Portland, Or.

A. J. Cooper, a Chicago capitalist, offers to build a $700,000 hotel if the citizens give him $250,000.

Permits have been granted for construction of a one-story frame dwelling on the corner of Sixteenth and M Streets, for J. Connor, to cost $2,200; two one-story frame dwellings on the corner of Lownsdale and Clay Streets for Mrs. Rice, to cost $2,200, and a three-story frame dwelling on the corner of Tenth and Mill Streets, for R. P. Earhart, to cost $8,500.

Work will be commenced in a few days on the building of the cyclorama of the Battle of Gettysburg. It will be located on the corner of Third and Pine Streets.

W. S. Ladd has started the subscription for the new hotel project with $25,000.

A three-story brick addition is to be made at once to the rear of the *Oregonian* office building, and another story added to the main structure. The cost will be about $10,000.

Charles H. Dodd has ordered the construction of a four-story brick block, 75x80 feet, on the southeast corner of Front and A Streets, to cost $60,000.

A two-story frame dwelling is to be built on D Street, between Twelfth and Thirteenth, for P. W. Gillette, to cost $2,000.

Chas. H. Dodd has been granted a permit to build a four-story brick block on the corner of Front and A Streets, to cost $75,000.

A Methodist Church is soon to be built at Burns, to cost about $1,200.

Baker City has voted to issue $30,000 in bonds to build a new school-house.

Riverside.

A. W. Boggs has secured the contract for the foundations of the Rubidoux Hotel. J.

C. Pelton was the successful competitor for preparing plans, etc.

Sacramento.

L Street, bet. Eighth and Ninth. Two-story and basement residence. Owner, John Sheeren; architect, N. D. Goodell; contractors, Bohn Brothers. Cost, $4,000.

G Street, bet. Ninth and Tenth, two-story and basement residence. Owner, Mrs. Ellen Manning; architect, N. D. Goodell; contractor, B. F. Bell. Cost, $3, 00.

Capital Hotel, cor. K and Seventeenth Streets, alterations and additions. Owners, Blessing & Guthrie; architect, N. D. Goodell; contractors, Carle & Croly. Cost, $9,000.

J Street, bet. Ninth and Tenth, alterations and improvements. Owner, L. Elkus; architect, N. D. Goodell; contractors, Bohn Brothers. Cost, $1,200.

J Street, cor. Seventh, improvements and additions. Owner, T. M. Lindley; architect, N. D. Goodell; contractor, W. M. Reese. Cost, $10,000.

San Jose.

There will doubtless be more building done this fall than at any previous period in the history of San Jose. Among those who propose to erect residence buildings at once, are the following: Eugene Rosenthal, a handsome residence on his lot on Julian Street, between Third and Fourth. G. R. Jones, of Montreal, Canada, residence on Union Avenue, at a cost of $8,000. H. A. Hughes, lately from the East, a neat cottage on North Sixth Street, at a cost of $4,000.

C. D. Smith, of the firm of Kaufman, Smith & Hensley, has recently purchased a very desirable lot on Sixth Street, and has contracted for the erection of a fine dwelling.

G. N. Hensley, of the same firm, residence on Sixth Street.

W. S. Kaufman, the third member of the firm, fine dwelling on Third Street.

Theodore Lenzen is supervising the construction of a new residence on the Quinn Ranch, one on the Parr Ranch, one in Alviso, and a three-story hotel and an Odd Fellows' hall at Salinas. P. E. Bussell is completing the plans for a cottage on Lenzen Avenue for X. E. Burns, and also a plan for a $30,000 residence for an Eastern gentleman who recently purchased in this city.

Three cottages will soon be erected on the Lendrum Tract, in East San Jose, by William Winter, a San Francisco capitalist. Other San Francisco men propose to build here soon.

F. Brassy and Henry Ahlers have let to A. Kelsey, the well-known builder, a contract for the construction of two handsome residence houses at the corner of McLaughlin and Lick Avenues, in the Brassy & Ahlers addition to East San Jose, the price being $7,000 each.

Messrs. Brassy & Ahlers will build also another house close to the others, to cost $4,500, and the contract for still another will be let in a few days, making four handsome houses in all. San José is to be congratulated upon having two such energetic and enterprising men.

CONTRACTS LET.—Contracts have been let by Architect G. W. Page for the completion of the fourth story of East Hall of the University of the Pacific. A. J. McIlvain has the contract for $737.

A contract by the same architect has been made with J. J. McDaniels, for changes and additions to the building of the Home for Feeble-minded Children, for $2,700.

A third contract has been let to W. J. Wolcott for excavating and laying the foundation for the Conservatory of Music Chapel of the University of the Pacific for $3,227.

The following bids for building the new City Hall were opened:—

J. D. Stewart, common bricks, $112,654; pressed, $117,350; sandstone trimming, extra.

P. R. Wells, common, $112,000; pressed, $117,000.

Thos. Livingstone, common, $112,000; pressed, $117,500.

A. J. McIlvain, common, $114,500; pressed, $117,000.

Chas. Turel, San Francisco Co., common, $115,999; pressed, $119,999.

Albert Washburn, San Francisco, common, $116,881; pressed, $121,881.

Thos. Flynn offered to do the sandstone work if called for, at $7,825.

The contract was awarded to P. R. Wells and his bonds fixed at 25 per cent of the amount of his bid.

The total cost of the New City Hall will be as follows:—

F. Altman, cast-iron work	$1,880 00
F. Kuchenbeiser, wrought-iron	5,890 00
Combs, Blanchard & O'Neil, granite	5,180 00
Contracts already let	$ 12,950 00
P. R. Wells, brick and lumber work	117,000 00
Vaults, etc	3,000 00
Heaters, four	2,000 00
Electric Wires	250 00
Elevator	250 00
Total	$135,450 00
Architect's services, 3 per cent	4,062 60
Sum total	$139,512 60

Mrs. Mabury will build a $10,000 dwelling. P. R. Wells, contractor; Theo. Lenzen, architect.

N. D'Oyly is building a $12,000 dwelling from plans prepared by his architect, Theo. Lenzen. Thomas Livingston is contractor.

Theo. Lenzen has prepared plans for twelve brick buildings for New Chinatown. E. Base is contractor; $6,000 will cover the cost.

Six miles from town E. N. Parr will build a $5,000 dwelling. Theo. Lenzen is his architect; F. Davis, contractor.

One mile from town R. Wiltz is building a $4,500 dwelling. Theo. Lenzen, architect; Nickelson, contractor.

C. Lefranc, seven miles from town, is making large additions to his wine cellar. Theo. Lenzen, architect; G. E. McDougall, contractor.

San Rafael.

San Rafael Hotel. Three-story frame. Owner, San Rafael Hotel Company; architects, Curlett & Cuthbertson; contractor, Plereighton. Cost, $80,000.

Turlock.

San Strauss, of Turlock, has just purchased a piece of property near that town, and will immediately commence the construction of a $4,000 residence. James E. Wolfe, of San Francisco, is his architect.

Winters.

E. J. Englehardt is erecting a two-story frame to cost about $6,000. A. Ritchie is the architect and builder.

Judge Wm. Sims is having a two-story residence built. Gilbert & Son, of Woodland, are architects; R. B. Nissen, of Capay, contractor. Cost, $4,000.

T. D. Ball is superintending repairs on Mrs. D. Hemenway's residence.

W. J. Pleasants (seven miles from town) is spending about $2,500 in improvements.

A large force of men are grading on the Winters and Ukiah Railroad.

Most of the business firms of the town are having artificial stone sidewalks laid.

Miscellaneous.

It is estimated that it will require 11,000,000 feet of lumber to erect the buildings already under contract at San Carlos City, Lower California.

The stone foundation for the new schoolhouse at Rutherford has been laid, and contracts for the carpenter work will soon be open.

The rock foundation for the new Catholic school in St. Helena is completed, and work begun on the frame work.

Bassett Brothers, contractors and builders, have commenced work on the frame work of the Catholic College.

J. E. Whitson, of Selma, will soon let the contract for the building of his $30,000 hotel in that town.

The new County Hospital in Fresno City will cost $12,000. J. W. Bones is preparing plans and specifications.

J. H. Hamilton, of Fresno, is building a cottage on I Street, north of El Dorado Street.

Contractor Morrison, of Tacoma, was recently awarded the contract for building the addition to the Court House. The bid was $971.

The contract of building the superstructure of the Methodist Church in Seattle, and finishing up the basement, was let recently to Moses Keezer for $15,000.

The S. P. R. R. Co. are making arrangements to build a large, commodious new depot at Sumner. The old one will be used exclusively for freight.

THE LOS GUILUCOS HOTEL.

Thomas J. Ludwig states that he has closed the contract for the erection of a $11,000 hotel at the town site of Los Guilucos, and that work will soon be commenced. Teams have commenced hauling brick and lumber for the foundations.

ANAHEIM'S HOTEL—CONTRACTOR SCHINDLER SOON TO BEGIN WORK.

The contract for the cement sidewalks on the tract has been awarded to the Los Angeles Paving Company, of which Mr. E. A. Saxton, formerly of Anaheim, is manager. They expect to put a number of men at work shortly. Mr. Charles Schindler, who has the contract for the brick work, has received the foundation plans, and will start his men at work very soon. Directors Goldthwaite and Kroeger have the superintendence of the work of caring for the tract, grading streets, etc., and they are getting ready to make some wonderful improvements in the property.

PLANS APPROVED.

A meeting was held recently of the State Board of Examiners, Governor Waterman presiding, and Trustees Gally and Cunningham being present. The plans and specifications for the erection of three new wards at the hospital, and for furnishing the building, were submitted to the Board of Examiners by Messrs. Cunningham and Gally, and unanimously approved by the Board.

WORK ON THE SAN JOSE NEW CITY HALL.

The work on the New City Hall will be commenced at once. Sunday a cargo of cement arrived in San Francisco, and the amount necessary for the building here has been obtained by Daunes & Van Doren. The sewers will be laid first and then the foundations will be pushed forward. The sub-contractors are as follows: W. J. Wolcott, brick work; L. C. W. Otto, artificial stone and cement work; W. W. Montague, tiling; M. Lenzen, painting; W. P. Dougherty, mill work; John Stock & Sons, plumbing and tinning.

The contracts for the erection of a depot at Carlsbad and Encinitas were let, recently, by the California Southern Railroad Company, to F. M. Johnson, the contractor of the Barstow depot.

Architect Pugh, of Salem, is now engaged in making preliminary drawings of the proposed new Court House of Benton County. The building will cost $55,000, and will be in the Ionic style of architecture, and be of brick and stone. It will be built in 1888.

Fred E. Saider is building a handsome residence on Eighth Street in Seattle, to cost $12,000.

The Donahue Road will erect a new station in Coleman's Magnolia Tract, near Grant Avenue, San Rafael.

Architect Theo. Lenzen is in Salinas superintending Jeffery's new hotel. It is a three-story brick building, and will cost $20,000.

The Odd Fellows are erecting a $12,000 hall in Salinas. Theo. Lenzen has prepared the plans.

Mrs. Tilden is having built a $7,000 dwelling in Alviso. W. S. Boyles is the contractor, Theo. Lenzen, architect.

Near Dixon, Solano County, Cal., two-story and basement residence. Owner, J. F. Brown; architect, N. D. Goodell; contractor, B. F. Bell. Cost, $8,000.

SAN FRANCISCO BUILDING NEWS.

A

Army, nr. Guerrero. One-story frame.
O. and B.—Comerford.
$1,400.

B

Brannan, nr. Fourth. Additions.
$6,000.

Broadway, cor. Dupont. Three-story frame.
O.—V. Meninsini.
A.—Cappelleti.
C.—J. G. Adams.
$10,000.

Broderick, cor. Sacramento. One-story frame.
$1,000.

Bush, cor. Scott. Two two-story frames.
O.—D. Lohson.
C. and B.—W. Bluns.
$9,000.

C

California, nr. Laguna. Additions.
O.—T. Whitely.
A.—Huerne & Everett.
C.—McCready Bros.
$1,200.

California, nr. Front. Additions to brick building.
O.—S. L. Jones & Co.
A.—Macy & Jordan.
Carp.—Bateman Bros.
Mason—Dunbar & Morrell.
$17,000.

California, cor. Devisadero. Two-story frame.
O.—Geo. Hinkle.
Day work.
$6,500.

Capp, bet. Twenty-fifth and Twenty-sixth. One-story frame.
O.—Doyle.
C.—Sullivan.
$1,700.

Capp, nr. Twenty-fifth. Additions.
$1,000.

California, corner Devisadero. Two-story frame.
O.—George Hinkle.
Day work.
$6,500.

Clay, cor Laguna. Two-story frame, basement and attic.
O.—Irving Scott.
A.—Matthews & Son.
C.—Littlefield.
$10,000.

Columbia, bet. Twenty-fourth and Twenty-fifth. St.-Peter's Convent.
O.—Sisters of Mercy.
A.—J. J. Clark.
C.—Degan & Orford.
$5,000.

D

Davis, cor Vallejo. One-story frame.
O.—Coos Bay Coal Co.
$1,200.

Davis, cor Vallejo. Coal Bunker.
O.—Coos Bay Coal and Navigation Co.
C.—San Francisco Bridge Co.
$15,000.

Dolores, nr. Twenty-sixth. One-story frame.
O. and B.—R. Bergfeld.
$2,000.

Dupont, nr. Sacramento. Additions.
$500.

E

Eddy, cor. Van Ness ave. Two-story frame, basement and attic.
O.—Frattinger.
A.—R. R. Schmidt.
C.—P. Griffin.
$11,000.

Eighth Avenue, nr. Point Lobos Road. Star of the Sea Church.
O.—Father McGinty.
A.—Charles Devlin.
C.—J. Blake.
$10,000.

Eighteenth, nr. Douglass; one-story frame.
O.—W. Richter.
C.—A. Discher.
$1,500.

Eighteenth, nr. Castro. One-story frame.
O.—F. Reusche.
A.—P. R. Schmidt.
C.—F. Elam.
$2,800.

F

Fillmore, cor. Sacramento. Alterations.
O.—Schroeder & Bohman.
Day work.
$1,500.

Fourteenth, nr. Belcher. One-story frame.
$1,200.

G

Garden, nr Harrison. Additions.
$1,000.

Gilbert, nr. Bryant. Additions.
$700.

Golden Gate Avenue, cor Octavia. Two two-story frames.
O.—Wm. John.
A.—John & Zimmerman.
C.—B. Dreyer.
$7,000.

Guerrero, nr Twenty-sixth. Two-story frame.
$4,500.

Grove, bet Gough and Octavia. Two story frame.
O.—G. Ehrman.
A.—W. H. Armitage.
C.—L. Weisman.
$6,500.

H

Howard Court, nr. Fourth. Repairs.
$1,200.

Howard, nr. Thirteenth. Two-story frame.
O.—A. Johnson.
A.—John & Zimmerman.
C.—Schutt & Krecker.
$3,200.

I

Industrial School. Frame building for barn.
C.—H. Simmons.
$2,500.

Iowa, nr. Ropewalk. One-story frame.
O.—L. Meyer.
$1,500.

Iowa, nr. Solano. Two-story frame.
O.—Annie Hook.
C.—C. E. Dunshee.
$3,500.

J

Jackson, bet. Montgomery and Sansome. Alterations.
O.—D. Ghirardelli.
A.—W. Mosser.
C.—J. W. Wessinger.
$4,000.

Jackson, cor. Mason. Alterations.
O.—E. Frank.
A.—Salfield & Kohlberg.
C.—L. Weisman.
$7,000.

L

Laguna, bet Clay and Sacramento. Two-story basement and attic frame.
O.—Earls.
A.—Matthews.
C.—Littlefield.
$10,000.

Larkin, nr. Chestnut. Frame building.
O.—W. Perry.
A.—G. A. Bordwell.
C.—B. F. Ellis.
$1,500.

M

Minnesota, cor. Solano. Three-story frame.
O.—J. Mooney.
A.—Townsend & Wyneken.
C.—C. E. Dunshee.
$4,500.

Mission, nr. Ninth. Repairs.
O.—W. A. L. Miller.
$500.

Mississippi, nr. Solano. One story frame.
O.—Burglas.
C.—Meade.
$1,000.

Minna, nr. Fourteenth. Frame dwelling.
O.—J. Warren.
C.—G. Houston.
$1,600.

Market, bet. Fourth and Fifth. Alterations of old St. Ignatius Church into theater building.
$2,500.

Montgomery, nr California. Repairs.
$1,200.

N

Natoma, nr. Fifth. Three-story brick.
O.—J. F. Boyd.
A.—McDougall & Son.
C.—A. G. Fitzpatrick.
$45,000.

P

Pacific Avenue, nr. Fillmore. Two-story frame.
O.—Mrs. M. E. Green.
A.—Percy & Hamilton.
C.—Gray & Stover.
$8,000.

Pacific Avenue, nr. Gough. Five two-story frames.
O.—J. J. Hall.
A.—S. & J. C. Newsom.
C.—Knowles & Wetmore.
$15,000.

Page, bet. Gough and Octavia. Two-story frame.
O.—H. Dickerson.
C. and A.—J. P. Chadwick.
$4,000.

Pierce, nr. Haight. Two-story frame.
O.—M. A. Eddleman.
C.—J. Rountree.
$1,500.

Protrero Avenue, bet. Twentieth and Twenty-first. One-story frame.
O.—A. Pringle.
C.—C. O. Smith.
$2,000.

Powell, nr. Greenwich. Additions.
O.—B. Higgins.
A.—B. J. Clinch.
C.—T. O'Donnell.
$2,500.

Q

Quincy Place, nr. California. One-story brick.
O.—E. Garnier.
C.—Schoenmacher.
$2,200.

S

Sutter, nr. Taylor. Additions in rear.
$1,000.

San Jose Avenue, nr. Twenty-seventh. Two-story frame.
O. and B.—J. Comerford.
$3,000.

Sansome, nr. Sacramento. Additions.
O.—Palmer & Rey.
A.—Macy & Jordan.
C.—J. E. Kelly.
$6,000.

Sacramento, bet. Laguna and Buchanan. Two-story frame, basement and attic.
O.—R. C. Chambers.
A.—Matthews & Son.
C.—Littlefield.
$10,000.

Sanchez, nr. Seventeenth. Two-story frame.
O.—J. G. Hill.
C.—J. C. Gillespie.
$2,500.

Sierra, nr. Kentucky. One-story frame.
O. and B.—Keenan.
$1,000.

Sixth, nr. Harrison. Two one-story frames.
O.—J. Holjes.
C.—Munster.
$3,000.

Solano, nr. Iowa. Two-story frame.
O.—Annie Hook.
C.—C. E. Dunshee.
$3,500.

T

Tennessee, nr. Solano. Five one-story frames.
O.—Reis.
C.—R. O. Davis.
$5,000.

Tennessee. Additions to St. Thomas' Church.
$1,000.

Thirtieth, nr. Noe. Two-story frame.
O.—Pope.
$3,500.

Treat Avenue, nr. Twenty-second. Frame building.
O.—Oliver Madson.
A.—M. J. Welsh.
C.—Chisholm.
$4,500.

Twenty-sixth, nr. Dolores. One-story frame.
O. and B.—J. I. Comerford.
$1,000.

U

Union, nr. Franklin. Frame school.
O.—City of San Francisco.
A.—T. J. Welsh.
C.—P. B. McKay.
$18,440.

V

Vallejo, nr. Mason. Two-story frame.
O. and B.—P. J. Hanson.
$3,600.

W

Webster, cor. Clay. Additions.
O.—Veseria.
A.—C. Kenitzer.
C.—C. H. Rupell.
$1,000.

Washington, bet. Gough and Octavia. Two-story frame.
O.—P. G. Sabatie.
A.—Pississ & Moore.
C.—Jas. Geary.
$6,500.

Y

York, bet. Twenty-fifth and Twenty-sixth. Five one-story frames.
O.—Dr. C. C. O'Donnell.
Day work.
$4,000.

Lumber Market.

THE retail price list of the California Lumber Exchange for September 9, 1887, is as follows:—

Pine, Rough, per M feet	$22 50
Pine, Rough, No. 2	18 50
Pine, Rough, 40 to 50 feet lengths	28 50
Pine, Rough, 50 to 60 feet lengths	24 50
Pine, Rough, 60 to 70 feet lengths	25 50
Pine, Selected	26 50
Pine, Clear	33 50
Pine, Fire Wood	10 00
T. & G. Flooring, 1x6	35 00
T. & G. Flooring, 1¼x6, 1x4, 1¼x4, and narrower	40 00
T. & G. Flooring, No. 2	29 50
Stepping	45 00
Stepping, No. 2	32 50
Redwood, Rough	22 50
Redwood, Rough, No. 2	18 50
Redwood, Surfaced	37 50
Redwood, T. & G. 6 in., 12 feet and over	34 00
Redwood, T. & G. 6 in., 7 to 11 feet	27 00
Redwood, T. & G. 6 in., under 7 feet	24 00
Redwood, Rustic	37 50
Redwood, Rustic, No. 2	32 50
Redwood, T. & G. Beaded, 12 feet and over	36 00
Redwood, T. & G. Beaded, 7 to 11 feet	27 00
Redwood, T. & G. Beaded, under 7 feet	24 00
Redwood, Siding, ½ in	25 00
Pickets, Fancy	26 00
Pickets, Rough Pointed	19 50
Pickets, Rough Square	17 50
Shingles	2 25
Laths, 1¼	4 00
Laths, 1½	4 50
Furring, 1x2", per lineal foot	01
Battens, ½x3, per lineal foot	01

THE CALIFORNIA ARCHITECT AND BUILDING NEWS.

VOLUME VIII. ENTERED AT POST-OFFICE, SAN FRANCISCO, AS SECOND-CLASS MAIL MATTER. ESTABLISHED JANUARY, 1879. NUMBER 11.

THE

California Architect & Building News.

Established January, 1879.

The official organ of the San Francisco Chapter American Institute of Architects. Published by the SAN FRANCISCO ARCHITECTURAL PUBLISHING CO. No. 240 MONTGOMERY STREET, Rooms 11, 12, 13.

Terms per annum - - - - $2.00 in advance.

Published on the 15th of each Month.

When money is sent for subscriptions, the receipt of a copy of this Journal is an acknowledgment that it has been received. Unless requested we do not send receipts.

SAN FRANCISCO, CAL., NOV. 15, 1887.

Weekly Building News.

Before the next issue of this journal, subscribers will have received the first number of the weekly supplemental issue of this journal. Please bear in mind that it will only contain building news, *and will be used for no other purpose. Positively no advertisements inserted. In size it will be 9½x 14, or same as one page of this journal. It will be printed on same quality of paper, and will be furnished* **FREE** *to all subscribers to the "California Architect."*

TERMS--Two Dollars per year for both publications.

Office, 240 Montgomery St., San Francisco.

The attention of architects is called to the proposals for plans for the Provincial Royal Jubilee Hospital at Victoria, B. C.

Twenty-first Annual Convention of the American Institute of Architects.

THE Convention (as above) met in Chicago, October 19–21. It was one of the most successful meetings of the association since it first began its existence. Rooms in the newly completed Art Institute building were engaged for the Convention. Twenty-three cities were represented, the members numbering about sixty. No representative from California appeared in the roll call.

Among the more important resolutions considered was the following:—

"*Resolved*, That a committee of five members be appointed, of which the chairman of this Convention shall be an *ex-officio* member, the other members to be selected by him, to act jointly with one of a similar number to be appointed by the Western Association of Architects at their next annual meeting, to report as to the best and speediest methods of consolidating all the architectural societies of America into one organization, the report to be full regarding the form and constitution for local societies, and also regarding the form and constitution and permanent place of meeting for the national or representative body; that the Western Association of Architects be, and are hereby invited, to unite with us in this work, and to appoint a committee as above."

After considerable discussion, it was adopted.

Another question of much importance to architects related to a uniform system of contracts. This was referred to a special committee.

Richard M. Hunt, of New York, was elected President; Henry J. Potter, of New York, Secretary; O. P. Hatfield, re-elected Treasurer.

One of the social features of the Convention was the omission of the usual official banquet, and in its place a series of "lunches" was inaugurated.

Owing to the illness of the President, Mr. Walter, the Convention was presided over by the Vice-President, Ed. H. Kendall. We print the address in full, giving thanks to the *Inland Architect*, of Chicago, for our ability so to do.

THE PRESIDENT'S ADDRESS.

"Having known for only two or three weeks that, owing to serious illness, our esteemed President, Mr. Walter, could not be with us to-day, I can do little more than call you to order, and formally endeavor to perform the duties of chairman.

"I shall ask you, however, to undertake the business of this, our Twenty-first Annual Convention, with that especial dignity of bearing and soberness of purpose which would seem to be called for upon the attainment of our corporate majority, and will remind you that we are called together, in this great and prosperous city, for the purpose of exchanging our annual greetings, of renewing our allegiance one to another, of giving evidence that we are competent to do the work required of us, of investigating the current developments in the science and art of our profession, and of increasing our usefulness to ourselves and to our clients in all possible ways.

"We shall listen to papers from representative men upon subjects of especial interest, and reports of important committees must be heard and acted upon.

"One of the greatest difficulties encountered by your Board of Trustees, now that our field is so much enlarged, is the frequent meagerness of information concerning candidates for membership, and, in order to reduce this difficulty to a minimum, must we not soon devise a better method than the present one of determining whether or not those who wish to join us are qualified by education, by business habits, and by personal characteristics so to influence public opinion that we may command the respect and confidence of the several communities in which we work?

"Whether the present method can be made sufficient by a keener sense of responsibility on the part of those who know the applicants for fellowship, or associateship, or whether we should create an office, in the nature of a traveling secretaryship, the duties of which would be to come in personal contact with all our members and would-be members, and by intercourse and