

Market and City Hall Ave. Heating pipes; owner, R. J. Techau; architect, R. J. Techau; contractor, Harvey Heating Co.; cost, \$1,500; signed, Jan. 2; filed, Jan. 10; payments, 75 per cent as work progresses; 25 per cent, 35 days.

Mission near 10th. Carpenter work; owner, Thos. Doolan; architect, F. T. Daslan; contractor, F. T. Daslan; cost, \$10,000; signed, Dec. 10; filed, Jan. 14; payments, \$1,500, framed; \$1,500, outside finish on; \$2,250, finished; \$2,250, 35 days.

New City Hall. A statue; owner, E. B. Mastick et al.; contractor, F. Harpersberger; cost, \$100,000; signed, Jan. 21; filed, Jan. 21; payments, 75 per cent as work progresses; 25 per cent, 35 days.

Nineteenth near Sanchez. Carpenter and brick work; owner, Andrew B. Knox; contractor, A. S. Cook; surety, C. E. Pillsbury, \$500; cost, \$2,800; signed, Jan. 8; filed, Jan. 9; payments, \$700, framed; \$700, brown mortared; \$0.00, accepted; \$800, 35 days.

Nue and Eighteenth. Carpenter work; owner, J. D. Davidson; architects, Gould and Colley; contractor, Wm. P. McPhee; cost, \$2,700; signed, Jan. 29; filed, Jan. 29; payments, \$32.50, framed; \$32.50, brown coated; \$682.50, completed; \$82.50, 35 days.

No. 1412 Lyon St. Alterations; owner, A. S. Baker; architects, Gould & Colley; contractors, R. D. Miller & Co.; cost, \$1,715; signed, Dec. 12; filed, Jan. 7; payments, \$400, house raised; \$500, ready for plastering; \$400, brown mortared; \$415, 35 days.

No. 222 Shotwell St. Alterations; owner, F. Andell; architect, F. Andell; contractor, F. Weinocill; surety, Martin Bahrt, \$2,000; cost, \$2,600; signed, Jan. 22; filed, Jan. 21; payments, \$300, house raised; \$400, brown mortared; \$600, white coated; \$600, completed; \$700, 35 days.

No. 1234 Post. Alterations and additions; owner, J. Naphthaly; architect, P. R. Schmidt; contractor, J. Barnes; surety, E. Loost, \$407.75; cost, \$1,631; signed, Jan. 26; filed, Jan. 27; payments, 75 per cent as work progresses; 25 per cent, 35 days.

Oak near Broderick. 3-dwelling houses; owner, Mark Levi; architect, Geo. C. Sargent; contractor, Louis Lander; cost, \$0.00; signed, Jan. 10; filed, Jan. 10; payments, 75 per cent of value of work done; bal., 35 days.

Oak near Ashbury. 2-story frame; owner, W. A. Johnston, by atty.; architect, W. W. Rednall; sureties, S. E. Slade Lumber Co. & Jason, Springer & Co., \$800; cost, \$3,312; signed, Jan. 7; filed, Jan. 12; payments, \$330, roofed; \$580, brown mortared; \$800, completed; \$822, 35 days.

Pacific near Dupont. Brick building; owner, A. E. O'Connell; contractors, M. Fennell & Son; cost, \$2,000; signed, Jan. 14; filed, Jan. 15; payments, \$750, ready for ceiling joists; \$750, completed; \$300, 35 days.

Page near Lott. Carpenter work etc.; owner, Wm. Murasky; architects, Shea & Shea; contractor, J. T. Moore; cost, \$4,710; signed, Dec. 29; filed, Jan. 5; payments, \$802, framed; \$802, brown mortared; \$802, hard finished; \$800, completed; \$1,500, 35 days.

Palace Hotel. Hardwood finish for corridors, stairs etc.; owner, E. G. Newlands; trustee, architect, J. M. Wood; contractor, Carsley & East Manufacturing Co.; cost, \$15,175; signed, Jan. 6; filed, Jan. 6; payments, 75 per cent as work progresses; 25 per cent, 35 days.

Pine near Baker. Two 2-story frame; owner, Caroline Hirsch; architect, John & Balezynski; contractor, Ivory Wells; cost, \$3,800; signed, Jan. 10; filed, Jan. 19; payments, \$700, framed; \$700, partitions set; \$700, white coated; \$787.50, completed; \$902.50, 35 days.

Sacramento near Spruce. Carpenter work; owner, Geo. Healing; architect, Geo. Healing; contractor, Jas. Healing; cost, \$2,500; signed, Jan. 26; filed, Jan. 26; payments, \$425, framed; \$425, brown mortared; \$425, 35 days.

Sacramento near Mason. To build; owner, E. A. Denicke; architect, P. R. Schmidt; contractor, J. H. O'Brien; cost, \$3,200; signed, Jan. 12; filed, Jan. 12; payments, 75 per cent as work progresses; 25 per cent, 35 days.

Scott near Waller. Two-story building; owner, Francis O'Neil; architect, John Foster; contractor, John Foster; cost, \$7,000; signed, Jan. 26; filed, Jan. 26; payments, 75 per cent as work progresses; 25 per cent, 35 days.

Seventeenth and Harrison. 3-story frame; owner, Mission Pottery Co.; architect, Chas. J. Devlin; contractor, J. F. Logan; sureties, C. A. Warren & Gustav Karischke; cost, \$1,500; cost, \$5,903; signed, Jan. 5; filed, Jan. 6; payments, 75 per cent as work progresses; 25 per cent, 35 days.

Sutter near Fillmore. Frame building; owner, Mrs. Dora Steckler; architect, J. J. Clark; contractor, F. L. Hansen; sureties, Wm. Crocker & Fabian Jost, \$1,335; cost, \$7,370; signed, Jan. 12; filed, Jan. 16; payments, \$600, framed; \$1,250, floored; \$1,250, brown mortared; \$1,375, doors hung; \$1,000, completed; \$1,825, 35 days.

Sutter near Jones. Alterations; owner, C. M. P. Coleman; architect, Clinton Day; contractor, Wm. T. Connary; cost, \$13,700; signed, Jan. 21; filed, Jan. 24; payments, \$3,000, framed; \$3,000, chimneys built; \$4,275, completed; \$3,425, 35 days.

Sutter near Webster. Two 2-story frames; owner, Mary A. Cotton; architect, P. R. Schmidt; contractor, J. J. O'Brien; cost, \$9,250; signed, Jan. 27; filed, Jan. 28; payments, 75 per cent as work progresses; 25 per cent, 35 days.

Tenth near Folsom. Two-story frame building; owner, Michael Healy; architect, M. J. Welsh; contractors, Cuneo & Casaretto; sureties, F. Rate & A. Cuneo; \$1,025, cost, \$4,100; signed, Jan. 28; filed, Jan. 29; payments, \$1,025, framed; \$1,025, brown mortared; \$1,025, completed; \$1,025, 35 days.

Turk near Broderick. Plumbing and gas fitting; owner, J. A. Oliver; architect, P. R. Schmidt; contractor, R. A. Vance; cost, \$1,750; signed, Dec. 23; filed, Jan. 6; payments, 75 per cent as work progresses; 25 per cent, 35 days.

Twenty-second near Noe. Frame building; owner, E. Schwerin Jr.; contractor, Jas. Campbell; sureties, A. W. Starbird & J. B. Goldstein, \$1,000; cost, \$3,250; payments, \$812.50, framed; \$812.50, mortared; \$812.50, completed; \$812.50, 35 days.

Twenty-fourth and Castro. Frame building; owner, Jas. J. Manning; architect, J. J. Clark; contractor, W. Lindner; surety, B. Loost, \$1,024; cost, \$4,338; signed, Dec. 22; filed, Jan. 17; payments, \$1,085, brown mortared; \$1,085, completed; bal., 35 days.

Twenty-fourth near Howard. 1-story frame; owner, C. A. Barnes; architect, M. J. Welsh; contractor, W. Lindner; surety, B. Loost, \$1,024; cost, \$4,338; signed, Dec. 22; filed, Jan. 17; payments, \$1,085, brown mortared; \$1,085, completed; \$291, 35 days.

Willow Ave. near Polk. 2-story; owner, Jacob Haaf; architect, W. Winterhalter; contractor, Schmid & Hoeller; cost, \$3,785; signed, Jan. 17; filed, Jan. 19; payments, \$1,000, tinued; \$785, rough plastered; \$1,000, completed; \$1,000, 35 days.

Alameda County.

Avery Tract, Berkeley. To build; owner, Henry C. Bascom; architect, A. H. Broad; contractor, A. H. Broad; cost, \$3,450; signed, Jan. 12; filed, Jan. 23; payments, \$300, framed; \$300, brown mortared; \$300, completed; \$750, 35 days.

Block C, Leonard Tract, Oakland. Dwelling house; owner, John Rose; architect, C. M. Johnson; contractor, C. M. Johnson; cost, \$1,450; signed, Jan. 13; filed, Jan. 16; payments, \$350, enclosed; \$350, brown mortared; \$350, completed; \$400, 35 days.

Block 16, Buttes Tract, Oakland. 1-story cottage; owner, C. H. Klinkner; architects, J. J. & T. D. Newsom; contractor, G. B. Somner; cost, \$1,625; signed, Jan. 5; filed, Jan. 8; payments, \$400, roof boards on etc.; \$400, first coat of mortar on; \$418, completed; \$407, 35 days.

Buena Vista Ave., Alameda. To build; owner, A. Brand; architects, A. W. Pattiani & Co.; contractors, A. W. Pattiani & Co.; cost, \$2,289; signed, Jan. 22; filed, Jan. 23; payments, \$650, rustic and roof shingles on and chimney built; \$50, window frames set, brown mortar on; \$519, completed; \$570, 35 days.

Durant Ave. near Choate St. Berkeley. 2-story building; owner, Mrs. Ellen Blood; architect, R. Gray Price; contractors, Oakland B'd. & Imp. Co.; cost, \$2,700; signed, Jan. 24; filed, Jan. 24; payments, \$675, enclosed; \$675, brown mortar on; \$675, last coat plaster; \$675, 35 days.

Enclinal Ave. near Grand St., Alameda. To build; owners, Mrs. M. F. & F. N. Delaney; architects, A. W. Pattiani & Co.; contractor, A. W. Pattiani & Co.; cost, \$2,570; signed, Jan. 23; filed, Jan. 24; payments, \$700, floor joists in; \$700, rustic and roof shingles on, chimney built; \$600, window frames set, brown mortar on; \$550, completed; \$550, 35 days.

Paradise St. near Pelton. Alterations; owner, C. W. Smith; architect, W. H. Lillie; contractor, C. H. Moore; cost, \$1,550; signed, Jan. 13; filed, Jan. 15; payments, \$500, building moved; \$250, brown mortared; \$250, completed; \$250, 30 days; \$300, 60 days.

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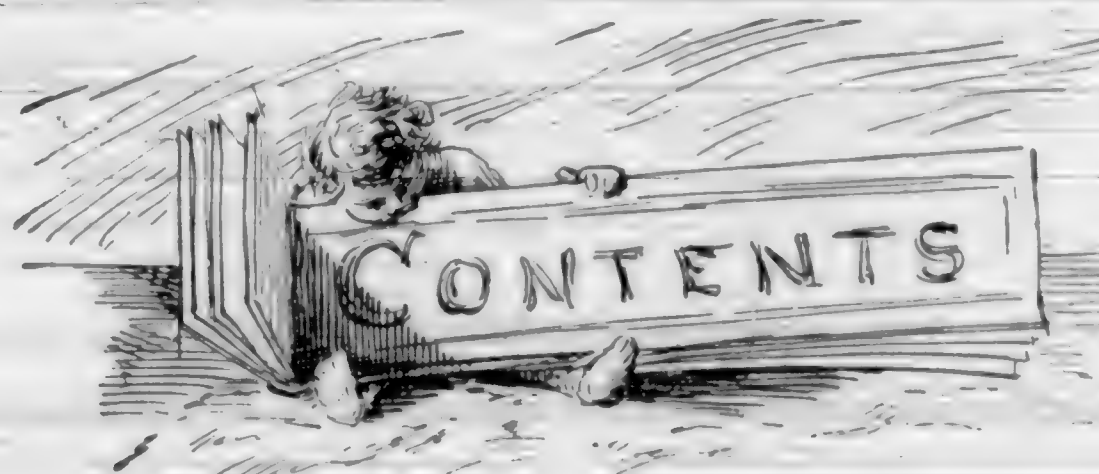
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NOTICE.

Correspondents should address their communications to the California Architect and Building News, 408 California Street, San Francisco, Cal.

The process of evolution in the domestic architecture of San Francisco, has, from the comparatively short period of the City's existence, taken place much more rapidly than in the older cities of the eastern states.

Though San Francisco could boast of many extensive structures built before the destructive fire that destroyed a large part of the City early in the fifties, we will commence our review by referring to the time shortly after this event, when Russian Hill assumed the lead as the aristocratic residence portion of the city, and the octagon house, and its gravel walls, became the rage. From this beginning came the house of many angles; and the celebrated house with sixteen corners, which was still in

existence a short time ago. The fashionable quarter however, soon shifted to Rincon Hill, and took the lead with brick residences and swell fronts, in imitation of the same class of buildings in Boston. South Park is still today a practical example of this style of architecture, which brings us up into the 'sixties—when the dwelling houses became provided with finished basements, more or less below the level of the sidewalk—and square fronts ornamented with long verandas and porches along the front, with large solid square columns.

On account of these verandas depriving the buildings of needful light and sun, and offering too great opportunities for the dust to be deposited in their corners, they were gradually supplanted by bay windows which have been modified and improved till the elaborately finished bay window of to-day resulted, which so completely fills the requirements by furnishing space, sun and view, that there is no doubt it will long continue to occupy its present high place in the opinion of the householder.

As the business part of the City began to encroach on the residence portions, and stores usurped places that should properly have been reserved for residences, the blocks assumed a more or less heterogeneous appearance that was not desirable.

To obviate this disagreeable possibility, entire blocks of dwellings were built at one time, and disposed of to purchasers who wished to be assured of their surroundings.

The mistake made by these pioneer innovators, was that their buildings were all alike, and being all cast in the same mould, caused confusion and trouble to the dwellers therein.

It did not require much time, however, for the builders to vary the monotony of a long block by alternating two different designs, which were still further varied by being painted in different colors.

Even this did not prove entirely satisfactory, and now the enterprising builder secures the services of an architect who will design a row of houses, no two of which are alike, and yet not so dissimilar as to lack harmony which should always exist.

We have not touched on the changes in the arrangement and construction of office and business blocks, though they have been even more radical, and in place of the two and three story buildings we used to consider sufficient, we now have arrived at eight and ten story structures, with every prospect of seeing these heights doubled or tripled in the near future.

OLD MISSION CHURCH AT SONOMA, CALIFORNIA.

(CONTINUED FROM PAGE 16.)

The exterior walls show some of the peculiarities of construction of that period. FIG. 6, is the elevation of the rear wall with the veranda removed so as to show the position of the upper windows; FIG. 7, the elevation of the rear, complete; FIG. 8, the elevation of front wall with veranda removed and FIG. 9, the elevation of the front as finished and as it appears at the present date. The large opening, 11 feet wide, at one end

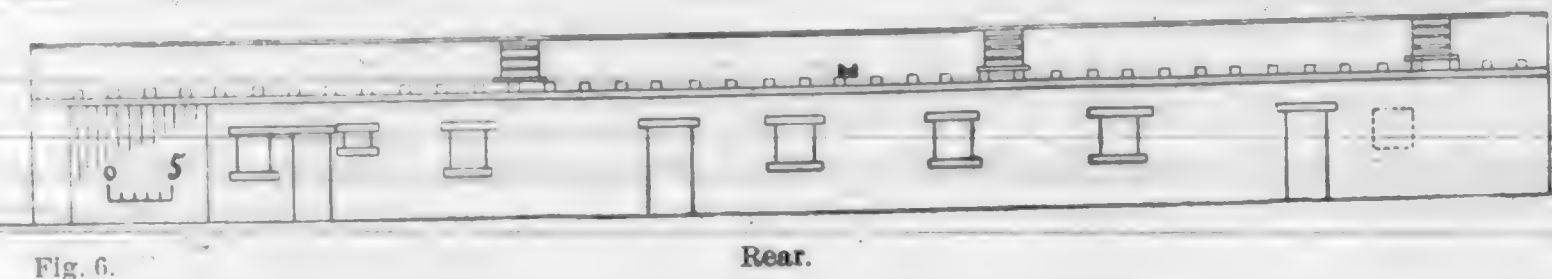


Fig. 6. Rear.

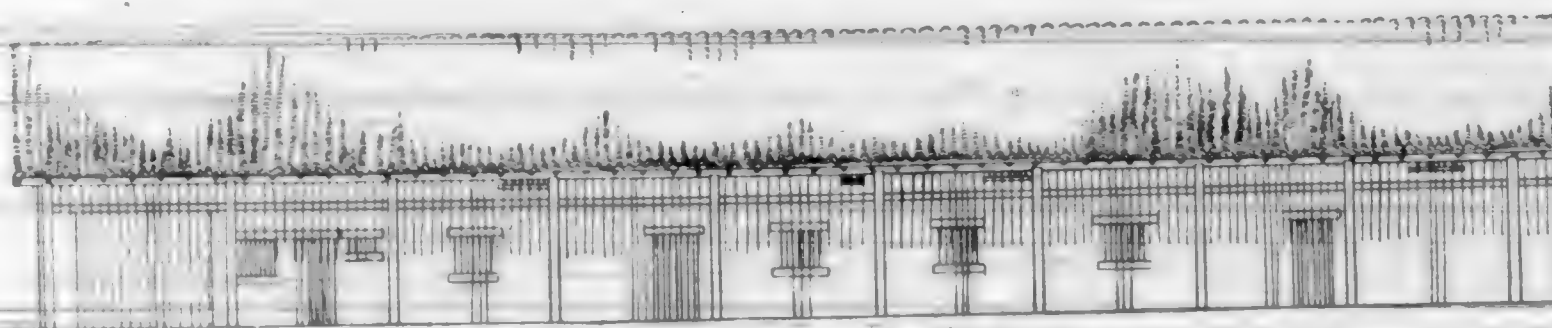


Fig. 7. Rear—Elevation.

can best be located by an inspection of the "plan" FIG. 1. The dotted lines represent former openings for doors or windows and which have at different times been changed or closed. The doorways are about $3\frac{1}{2}$ feet in width by 7 feet in height, and the windows about $2\frac{1}{2}$ feet in width by $4\frac{1}{2}$ feet in height. The frame work for the doors and windows appears to be of more recent work. The sills for the windows are about 4 inches thick by 9 to 11 inches wide, and the lintels for openings for doors and windows, 7 inches thick, and the width of the thickness of wall which is 3 feet, and formed of three to four pieces. There seems to have been no rule for the length of bearings at

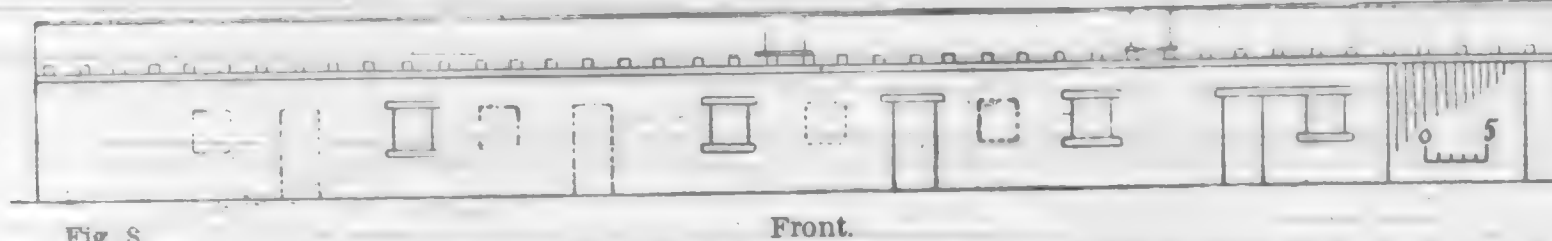


Fig. 8. Front.

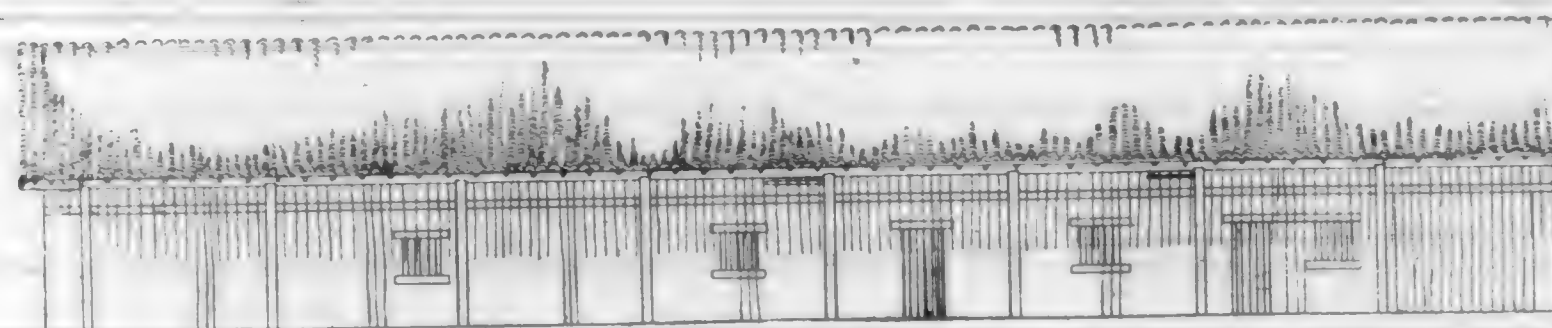


Fig. 9. Front—Elevation.

ends of lintels or sills, as some of them extend 9 to 22 inches, while others extend over two or three openings without a break. At the height of attic floor there are placed in the wall on the interior and exterior, and extending in an unbroken line, a timber or wall plate as shown in FIG. 2 at r and $4\frac{1}{2}$ inches thick. The floor beams bear on the wall plates and extend through the walls. The ends of floor timbers and the wall plates, lintels, etc., are shown on the elevations. Openings were placed where desired and without regard to constructive bearing lines. The small opening at rear of attic was the outlet for the waste conductor from the attic story.

INSTRUCTION IN DRAWING.

A CRITICAL REVIEW OF THE PRANG COURSE IN FORM-STUDY AND DRAWING.—CONTINUED FROM PAGE 125, Vol. XI.

Every object used in instruction is a vehicle for exercise in thinking and speaking; and the drawing-lesson is made the means of formal education and culture, drawing being itself a language.

As has been stated, modelling in clay and the shaping of paper into geometric forms are related to this course, being considered important adjuncts, and are indeed the first steps in the direction of manual training. In the third year the sphere, cube, and cylinder are thoroughly reviewed as basis for later instruction, and are treated accordingly, being among the most fundamental of natural forms, referred to continually during the course of the study. Natural objects are considered for representation, as the apple, the toad-stool, the leaf of the plantain; also objects of art, as a cubical basket, a Greek cross, a rectangular paste-board box, etc. In connection with the methodical study and understanding of such objects, instruction is given in the production of running or continuous designs for borders, etc.

In the fourth year the cylinder, four-sided prism, and vase forms are represented. By the use of these models the scholar reviews various geometric figures and different curves. From solids

geometric drawings are made, and leaves and other parts of plants are drawn. It will be observed that during the first four years of the Prang Course great stress is laid upon developing the observing powers through the study of things. This study awakens reflection, or thought, concerning the things observed, and this thought finds expression by means of modelling and drawing by oral expression. The sense of touch also plays its own important part in these exercises. In short, all is natural. It is characteristic of this stage that less importance attaches to accuracy of reproduction in drawing than to correct observation.

At the beginning of the fifth year the pupil is familiarized with fundamental forms, and his powers of observation are such that a more accurate study of details begins. From this time drawing becomes of more importance than heretofore as a means of expressing the results of observation, and systematic instruction in accurate drawing follows. The ellipsoid, ovoid, and three-sided prism are now the forms which are to be studied, to succeed those of the previous years. The appearance of cylindric models placed below the level of the eye is attentively studied, and in the line of decoration, rosettes, original arrangement of triangles, and flowers in full face. At this time the scholar is prepared to construct an object from a given drawing which contains three views of the object.

In the fifth year the cone and conical objects make their appearance as basic forms, and the study of the appearance of objects—that is, the beginning of perspective—is taken up. The development of ornament from plant forms is continued. After the first three or four years of study we find the power of observation greatly increased through the cultivation of the senses of sight and touch; and rule and compasses being unused, skill in free-hand drawing has been developed.

In the work of the latter school years instruction takes on a more practical form. Three different yet co-related aims are indicated, described in the Prang Course as Construction, Representation, and Decoration. By Construction is meant the study of the facts of forms leading to mechanical drawing for practical purposes of construction, and the purely industrial element prevails. Here it is especially interesting to observe how full constructive drawing is built up, or developed, from the study of the separate geometric views of objects begun in the first year. It is only the truth to say that the Prang Course was the first to

present this phase of the study in this original and attractive way. It is presupposed that practical working drawings and descriptive geometry will be pursued later on, when a definite knowledge of the facts of form will prove of great importance.

Under the head of Representation the Prang Course treats of the principles of perspective and of harmonious grouping of objects. A circumstance which strikes one very agreeably is that at this stage little is said to the theory of perspective, the object of the method being to induce pupils to see perspective themselves, without troubling themselves too much about the *a priori* theory. Thus by degrees they assimilate, as it were, the substance of the science easily and unconsciously, and can readily fit what is thus acquired to the complete formulated theory at the proper time. This idea may be called a masterly conception; for how many students pass without difficulty a severe examination in theoretical perspective without being able to draw even simple objects in perspective with any degree of correctness.

Under Decoration the Prang Course presents the elementary principles which should determine the selection, combination, and idealization of both geometric and natural forms for practical use in the decorative arts. For example, some historical (Gothic and Grecian) forms of ornament are given, and the learner is taught how to use natural objects for the purpose of conventional design according to the principles of aesthetics.

The work of the last school-year is, of course, in advance of the previous study, with the addition of the use of instruments and drawing to scale in the department of practical construction. The authors of the Course observe in their manual that at this point they would gladly introduce the study of light and shade and color, but that the conditions of school education in America will not yet admit of it, though they hope the time is near when they can carry out the fulfilment of their desires in these respects.

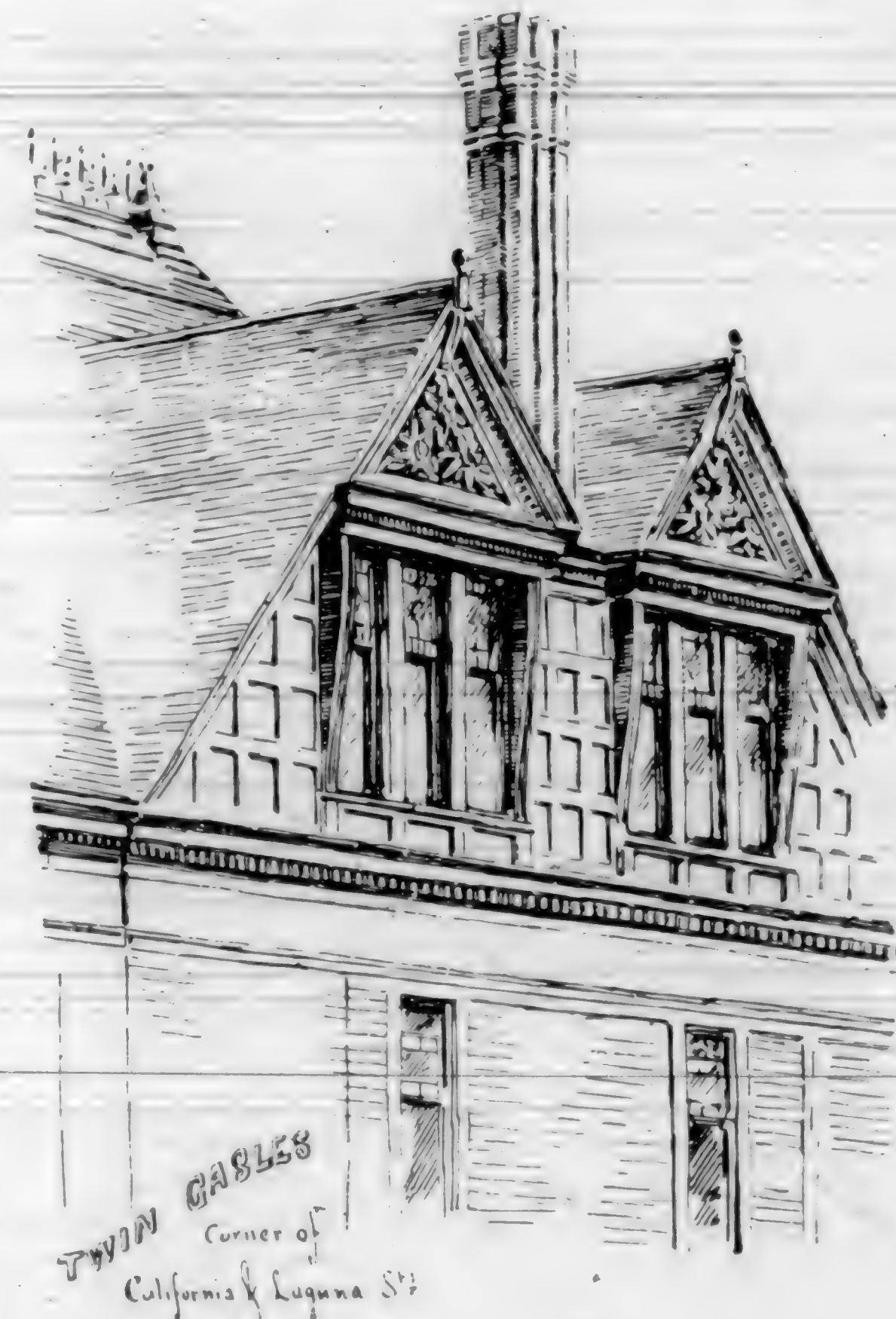
If we now consider the Prang Course as a whole, and compare it with corresponding methods provided for teaching drawing in elementary schools in Europe, the great superiority of the Prang Course cannot escape us. It is, in fact, a step in practical pedagogics surpassing anything which has been done in this direction in Europe. Unity, previously wanting, has been given to the study of drawing; and the fundamental principles of constructive, pictorial, and decorative drawing have been presented in their true relations.

It may be asked how it was possible that the comprehensive course we have been describing could have come into such general use and have met with such success in so short a time, as every new method of instruction, to be properly put in practice, cannot be well mastered and understood by teachers. This obstacle Mr. Prang recognized in good time; and after his Course had been approved by the principal educators of the country he set himself to supply courses of instruction for teachers also. This was to be done by preparing them separately or together, according to circumstances, and to this end normal drawing-classes were established, the instruction being given by correspondence; and experience has proved this to be a practical way of meeting the difficulty beyond all expectation. It is shown that this method of normal instruction has certain advantages which personal instruction lacks. The student is left to depend more upon himself, and is therefore obliged to give his earnest attention and thought to the work in hand. Individuality under such conditions is free to develop its indescribable charm, where otherwise too fixed and formal standards of personal instruction might lead to lifeless uniformity. In short, Prang's Normal Drawing-classes have met with general recognition; and it is stated that nothing that has been done for the development of drawing-instruction in the American schools can show a wider influence or greater success. It may truly be said that The Prang Educational Company, as the originator of this undertaking, must always have the credit of introducing an ethical factor into the system of popular education in America which, without interfering with the practical progress of this sober-minded people, must elevate all its standards, and greatly add to its artistic perception and its aesthetic enjoyment.

Throughout this whole course of instruction, and animating the wise provisions for introducing it into the schools, there is apparent an earnest desire to inspire a love of beauty, and to honestly educate public taste. In this Europe of ours, where for a decade all the nations have been under arms, and techni-

cal ability is utilized in perfecting deadly weapons for slaughtering the masses, and millions are spent for standing armies, and insecurity and poverty benumb whole peoples,—here in Europe there was no place for the work of such a man as Mr. Prang. He was therefore driven from the country of his birth to become a benefactor to the country of his adoption,—a country which goes on developing itself, not only in physical resources, but which is beginning to divert the stream of culture, stagnating in Europe, into the free fields of teeming activity in the new world. To America belongs the future. Soon will the United States surpass us in Art as well as in Science, if we do not arouse ourselves and strive with energy to reform and renew our common-school system, in spite of the depressing and unfavorable conditions and the present political complications of the old world.

Without progress and life in our primary and intermediate schools, and higher educational institutions can never prosper. Therefore will not the whole body of Europeans unite and view these circumstances, and strive for something similar to that which America is doing in Drawing in her public schools, owing to the wise provisions of Louis Prang? There is yet time, and we may yet be able to look back with pride on what has been accomplished here, in spite of all our difficult and untoward circumstances. There is not a moment to be lost in view of the close rivalry which exists and increases throughout the world. We must rally our forces and strive for something better; something so good that competition need not be feared even from America.





The management of this journal desires to extend a cordial invitation to all architects on this Coast and elsewhere to contribute designs for publication.

Drawings should be made with perfectly black lines on a smooth white surface. Good tracings, if made with black ink, answer the purpose.

The designs selected will be published without charge. All drawings, whether accepted or not, will be returned to their authors, who must bear express charges both ways.

The design for a City Club House is by Messrs. Mooser & Cuthbertson, Architects.

Our double plate is a block of six dwellings recently erected on the S. E. cor. of Oak and Lyon streets, from designs by W. H. Lillie, Architect for the Rountree Brothers.

MAISON DE CHASSE, ARDENNES.

This engraving herewith is a reproduction from the "Building News," London. The walls are of red bricks, the architraves and cornices are also of brick or terra-cotta. The engraving shows the details of the exterior finish. The size of bricks are 9 courses to 20 inches in height.

The illustrations on pages 28 and 30 of the "Twin Gables" and "Details of Residence" on the corner of California and Laguna streets are sketches from work erected from designs by Clinton Day, Architect.

GETTING THE STRENGTH OF WOOD.

BY W. E. PARTRIDGE.

De Long, in the journal which he kept on the Jeannette expedition, speaks of his ship as being "as strong as wood and iron could make her," and then gives a diagram showing how the ice crushed in parts of her framing. He was honest in his opinion, no doubt, and so have most constructors been, during the last thousand years. But honest opinions do not always make good workmanship. It would seem that we should be familiar enough with the properties of wood to know how to get the greatest amount of strength from it, but unfortunately we are not, excepting perhaps a few of the car builders.

The crushing strength of all wood in common use is several times as great upon the end as upon the side of the grain. This is a fact that every woodworker knows. Carpenters would laugh if one should state the fact to them, and yet from one end of the country to the other, builders and architects act as though they had never heard of it. They act just as De Long did when the strengthening timbers were placed in his ship. They make a strut bear directly upon the side of a timber. The bearing surface of the end comes fair upon the side of the grain. Long before the strut begins to feel the pressure, the side of the timber against which it bears has been crushed out of shape. Most people look at the crushed wood, remark, as did De Long, that the strength of the structure has been reached, and think no more about it. But the full strength of the timber is never

brought out in such cases. The strut has not felt its load, while the other member has been crippled or perhaps destroyed. The car-builders, with a sense of the fitness of things, put a shoe upon the strut. Not one of wood which would crush just as soon as the timber itself, but one of iron. This spreads out the foot of the strut or post, and gives it a large bearing. It is then able to transmit the whole load which it is capable of supporting to the side of the timber against which it rests. If the shoe has been properly proportioned, the strut will be just ready to spring when the shoe is being crushed into the side of the timber. Had this construction been adopted in that famous Jeannette, she would have been a great deal stronger without in the least adding to the quantity of timber in her hull. It would not, of course, have saved her from destruction but she would have been much nearer to the strength which she was supposed to have had. Everywhere there are structures in which maximum strength of the materials is wanted—structures in which struts of wood or wooden posts bear upon the sides of the other timbers, and bear directly without shoes to spread their bearing surface. By making suitable shoes and enlarging the bearing surface against the side of the grain, the increase of strength can usually be counted upon as double, the size of all the timbers measuring the same.

Some years since, the importance of this was forced upon the attention of the car-builders of the country by a series of experiments. A number of model trusses, representing the sides of freight cars, were tested. It was found that many of the strongest trusses failed with the smallest loads, because the diagonals and posts pulled into the sills and plates, and thus crippled the timbers long before the limit of their strength had been reached. Upon reconstruction with shoes, to give larger bearings to the posts and diagonals, the strength was enormously increased with the same size of timbers, the only increase of weight being the cast-iron shoes. When thus put together, it was found that with a crushing load all parts were ready to give out at the same time. The posts and plates were just ready to buckle and the sills to break. It was an even thing which would go first. In actual practice it was sometimes a post, at other times a sill, and then again, a bolt. In a word, the whole truss was fairly balanced as regards strength in all its parts.

THE MECHANICAL NEWS.

The following is taken from the Northwestern Lumberman.

A REDWOOD EXHIBIT AT CHICAGO.

At the Institute of Building Arts, 65 Washington street, is a redwood exhibit, placed there by E. Spencer Sturges, 153 Washington street, which admirably demonstrates the decorative possibilities of that great California wood. The display consists of various natural specimens of veneer, finished and unfinished, including curly, root, blister and burl redwood. The beauty of the wood is practically shown by two handsome tables and a complete mantel, entirely of redwood, which for elegance could scarcely be exceeded by any wood, mahogany or otherwise. The exhibit is daily examined by a large number of visitors, who come to the institute because of the great variety of things among the building arts there displayed, and architects have taken great interest in the wood. The fact is that very little has ever been done in this city in the way of introducing redwood for the various uses to which it is adapted, and intending consumers are more or less at sea in regard to the practical details of its sale and utilization. A great many inquiries are made respecting the cost of veneers, how they can be supplied, etc., and as to how low wide, clear redwood can be sold, but it often requires a good deal of experimenting and figuring before it can be ascertained whether redwood can be used to advantage.

With the present high price of cherry many regard it feasible to substitute redwood in making counter tops, organs, etc. Architects might be induced to bring it into use for interior finish, and the veneers might be pushed in all sorts of ways, providing, of course, the cost of transportation does not bring the price up too high.

Mr. Sturges reports a great deal of local interest in redwood, but that little is understood about it here, and that California manufacturers have a field for doing a great deal of missionary work in the way of informing the public regarding the adaptability, peculiarities and methods of treatment of redwood.



THE CARAT.

The purity of gold is estimated by an Abyssinian weight called a carat Arabian, quirrat, a bean, the fruit of the carab tree, which is subdivided into four parts called grains. The term carat when applied to gold and silver is not a weight unit, but the mode of expressing the purity or fineness of the metal in

twenty-fourths. Thus 18-carat gold is metal in which eighteen parts out of twenty-four (or three-fourths) are pure gold. This method of estimating fineness is traceable from the marc of Europe having been divided into twenty-four real carats or actual weight units. The present method is to estimate fineness in thousand; i. e., gold fine has 250 parts alloy, corresponds to 18 carat gold, three-quarters of the metal being pure gold in each case. Our gold coins are 21.19 carats.—TRADE JOURNAL.

OF PICTURESQUENESS.

The adjective "picturesque" is so often and so confidently applied in praise to buildings, that the endeavor to define wherein the quality exists, or to decide whether it be one that is in itself desirable, and to be sought after in our designs, may appear to many to be a work of supererogation and a waste of time and type. However, other minds, other thoughts; and some time since a well known architectural writer affirmed that the picturesque should not be aimed at in buildings so much as the "architecturesque"—which latter is a word not to be found in Johnson, but meaning apparently nearly the same thing as architectural—and he seemed to think that architecture (or beauty in building) was not only possible without picturesqueness, but that picturesqueness in a building was a foreign element that to some extent warred against and destroyed its architectural character. All nomenclature is conventional; the whole use of words is based on the supposition that men agree to understand thereby things that appear to them alike—feelings they possess in common. And yet (as has been often observed) it is very difficult to ascertain whether any two individuals mean by the use of any given word to describe exactly the same thing; and the more a word relates to that which is aesthetic and abstract the more does this difficulty increase. I believe that I understand by the word picturesque that which most other men understand thereby, but of this neither they nor I can be sure, though the opposite, if it be the case, may be proved; and what I here say of picturesqueness I say of that which I understand by the word.

If we endeavor to define the word "picturesque," we find that its etymological definition of "that peculiar kind of beauty which is agreeable in a picture, whether natural or artificial," does not express the whole idea that it now conveys to our mind. If it did so, the adjective might be as applicable to Murillo's "Maddonna" as to his "Boy Catching Fleas," and more so to the subjects of Fra Angelico than to those of Teniers, or (to return to architecture) to the buildings represented by Botticelli, Benozzo, Gozzoli, or Ghirlandajo as to those limned by Prout or Birket Foster. There is no reason why "the peculiar beauty" of St. Paul's or London-bridge should not be "agreeable in a picture," and yet we should hardly apply to them the epithet picturesque. Whereas we might and do apply it to the way in which the spire of St. Martin Ludgate Church breaks up the view of the Cathedral from the foot of the hill. When we speak of the sky-line of a building being picturesque we generally mean that it is broken by jutting gable, dormer, pinnacle, or chimney-shaft; a picturesque plan is one broken by bay-window, recess, oriole, or buttress; a picturesque base-line is that broken by the inequality of the ground. In fact, we find the picturesque in that which is imperfect, incomplete—in the broken.

And, furthermore, a new building can never be so picturesque as an aged one. Even if we dismiss all sense of color from our consideration, and say that lichens and mosses, and other pencillings and adornments of nature, being extraneous to the building, not rightly appertaining thereto, but superadded, should not therefore be admitted, any more than its surroundings, into our consideration of its proper picturesqueness; yet, even then, the broken lines of hog-backed roof, of uneven tiling, and weather-worn stone will still make an old building more picturesque (in the ordinary acceptation of the term) than one that is new. The tatters of the beggar are more picturesque than the broadcloth of the squire. The wrinkles of senility are more picturesque than the bloom and strength of youth.

Picturesqueness, then, would seem to consist in imperfection, and to reach its climax in imperfection showing signs of decay and approaching dissolution.

And yet no one can deny that, in the eyes of most men, this incompleteness—this decay—has (so far as architecture is concerned) a beauty, or rather a loveliness, above that of the utmost perfection and strength. And it is easy to see some reasons why it should be so. Firstly, each man hopes that, after his death, others will think of him, and we think of our fore-runners and preserve their works as an example to our successors to think of us and preserve our works. That this is one main cause of archaeology will be seen when we consider that, were we certain the world would end five years hence, few, if any, would continue their researches into the past, and in the case of these few it would be because such research had become a

matter of habit; whereas, if each were only certain that his own individual existence would end in that space of time, few antiquarians would desert their hobby, and it would increase in most men the feeling of love and reverence for the works of those who have preceded them.

But there is another and more direct cause for our partiality towards the imperfect and the worn. We are men conscious of imperfection in ourselves, and we are mortal; and the idea that stone and mortar should be perfect and immortal is repulsive to us. Each man may wish his own work to last, just as each man may wish his own children to outlive him; but this sentiment springs largely from two sources—rivalry with our fellows, envy that the children of others should live, and the works of others last, and ours not do so—and again the desire all men have for anything which they know that they can never possess. We know our works cannot be eternal, nor our descendants immortal, and so we would fain have them so; but put the case that we knew they would be immortal, eternal, and I believe our jealousy of their superior durability would soon turn to a hatred that would cause us to wish their destruction and death.

It would be opening a very wide subject were we to inquire into the cause of the feeling of jealousy or envy. It is sufficient here to state its existence; yet we may mention how that envy is nothing but a natural antipathy and repulsion from that which is unlike ourselves, either in quality or circumstance (which is but a form of quality). It is a sign of spiritual life. The most sensitive and spiritual races have it most. The envy, oftentimes to us apparently causeless, of the Easterns is proverbial.

But here it may be asked, "Did any mortal man ever feel jealous of cathedral or abbey, aqueduct or temple, or even of the Pyramids themselves?" No, for on all these we see the marks of Time's tooth and claw; but among buildings originally equal in beauty and strength we generally like best that which shows most signs of decay; and if it be answered that some of the strongest and oldest buildings are yet most attractive, it may be observed that there is more pleasure in seeing strong than weak things succumb to time, that envy is as much flattered by the slow (and apparently unwilling) decay of the former as by the more rapid and easy destruction of the latter—that it is more grateful to us to see pride and power abased, even if it be but slightly, than humility and weakness crushed into the dust.

But, it will be said, "the sight of Time's ravages on a building is not of itself pleasant to us. Our delight is in nothing where the strength of the wall, the bone and muscle of the masonry, still resists: in fact, it is with the building we sympathize, and not with Time, while we mark the conflict between the two." It is so; but sympathy can only exist between similar natures. Did the building show no signs of decay it would not be like us, and we could not sympathize with it. It is a difficult case even to imagine, for no building could exist without having in it causes of weakness, without showing signs, however minute, of approaching dissolution. Yet the shades of human feeling are so delicate and so complex that it is only, by nothing extreme examples that we can judge whereon our ordinary sentiments are based, and the love of picturesqueness is a spiritual and not a mental liking. To build picturesquely the designer need not be intellectual but sensitive; and it is often the weakest characters that are the most sensitive. The love of the picturesque in nature and art is not so often found in the full-blooded and strong as in the consumptive and sickly, for these have most affinity and sympathy with decay and death.

So much for the picturesqueness of age, whereto the picturesqueness of imperfection is nearly akin, both in itself and that it appeals to our sympathy, we might almost say, to our pity. Picturesqueness in a design or new building is generally synonymous with quaintness—that is, if by quaintness we mean, not neatness, nicety, minute elegance of details, but rather oddity, strangeness, the unusual, and unexpected. Quaintness is often only ugliness brought to such a pitch that it becomes amusing. I will instance a case in point. When visiting a gentleman's house in the country a comrade of mine, very fond of the picturesque, whether in nature or art, was much struck with a large zinc chimney cowl of the most wondrously impossible design, and expressed in no measured terms his pleasure at its quaintness. We heard that to cure a smoky chimney the neighboring ironmonger's stock of chimney heads had been ransacked by the master of the house in the hope of finding something that would be at least unobtrusive and not jar with the rest of a very pretty old English mansion. Finding each worse than the other he in



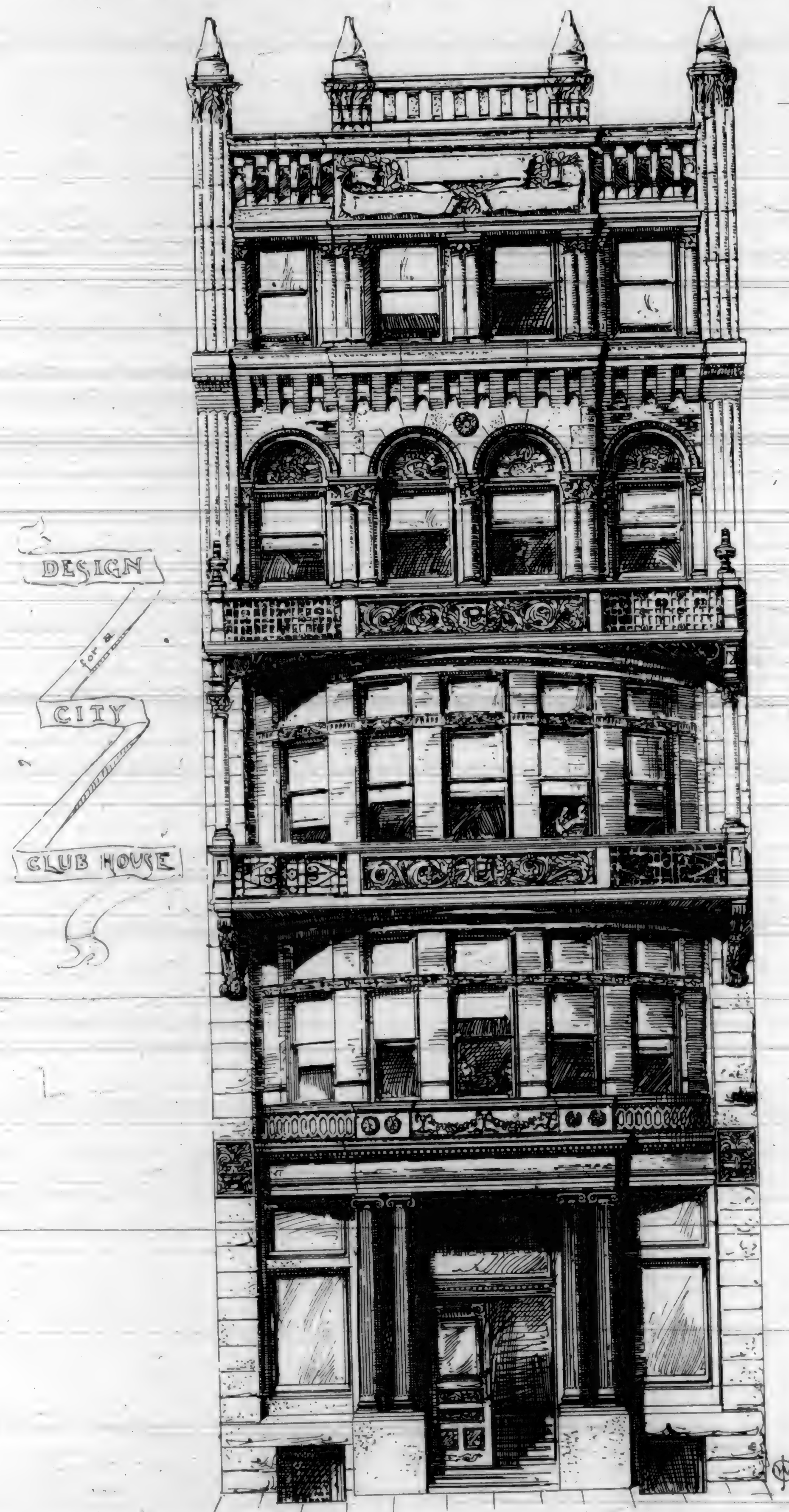
SKETCH OF HALL AND STAIR CASE OF CORNER HOUSE ©

THE NEW ROUNTREE BLOCK
S.E. COR. OF OAK & LYON STS.
ROUNTREE BRO'S BUILDERS
Nº 11 MONT ST S.F. CALA.

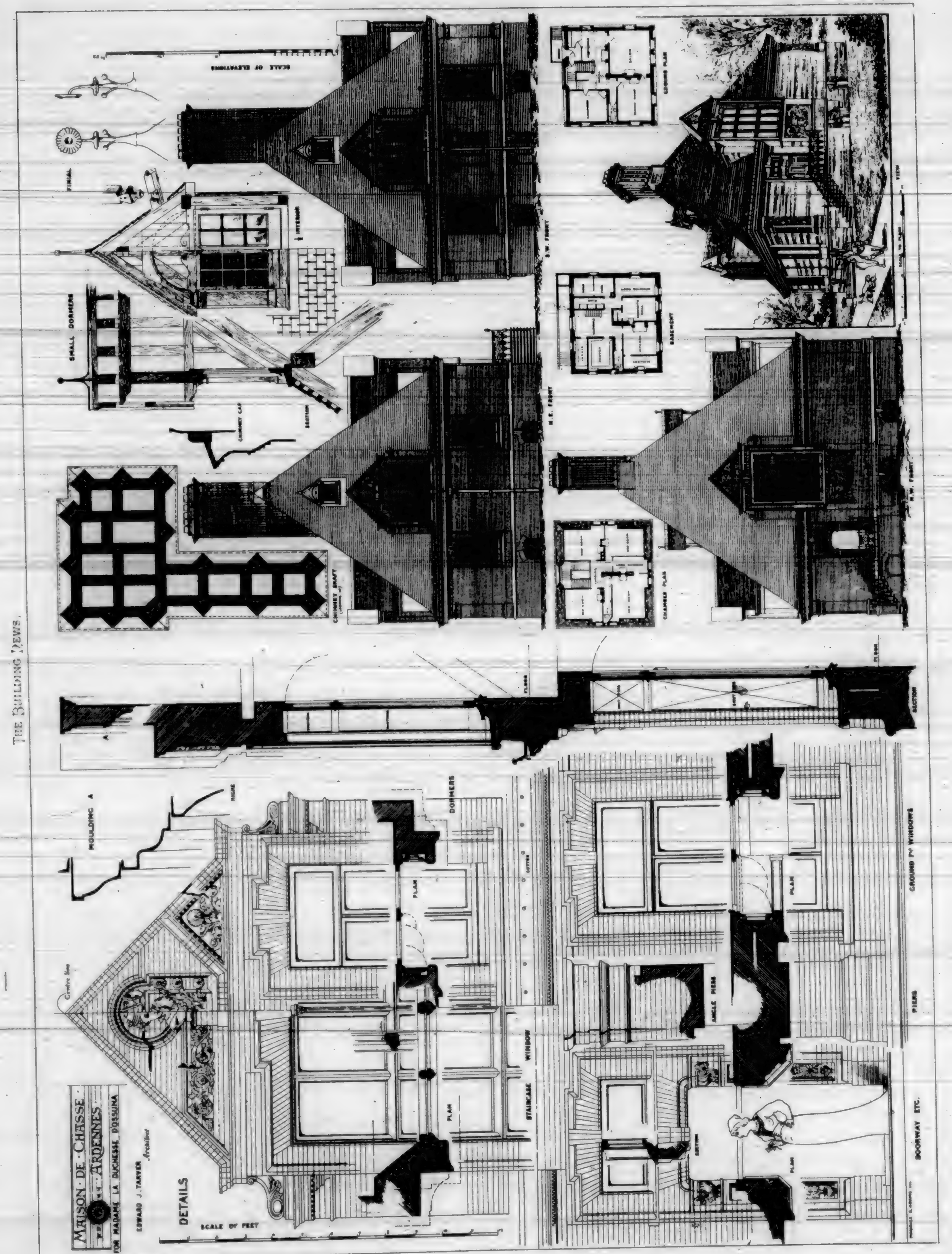


W. H. LILLIE, ARCHT.
Rº 28-29, STANN'S
BLDG. COR. POWEL
& EDDY STS. S.F. CAL.

THE CALIFORNIA ARCHITECT AND BUILDING NEWS.



THE CALIFORNIA ARCHITECT AND BUILDING NEWS.



despair chose the hughest and most hideous, and the result was what we saw—the picturesque.

And if quaintness be not always the same thing as ugliness yet it must always speak of thwarted human effort. At least true quaintness (that which comes unasked) does so. That spurious quaintness that is dragged in by the incompetent designer (pretty much as an incompetent cook might drown with pepper the nauseousness of his viands) speaks rather of a misdirection of human effort. One great reason why works of engineering are generally considered so unpicturesque is, that their authors appear to us to have perfectly succeeded in that which they attempted. Compare the bridge at Charing-cross with that at Albi. What trouble of mind, what anxious contrivance to overcome obstacles the builders of the former may have had, we see not: it only seems to us that they had a work to do and did it. An engineer may appreciate the difficulties they had to meet, and trace the means whereby they met such difficulties, and in his eyes the bridge may look picturesque, though since it is perfectly successful it never can look so to any very great extent, and to most men it is as uninteresting as a bridge can well be. That at Albi has been carried away by the floods of the Tarn I know not how often. The lower parts of the piers are of stone, but the pointed arches above are of brick, evidently built after some destruction of a former stone bridge, with its remains used here and there, and finally the bridge has been widened by throwing segmental arches between the piers outside the other. The result is a building that speaks plainly of a human struggle with the forces of nature. We appreciate the trouble, perplexity, and toil its makers went through. We pity them when we mark how, with bulky pier and heavy buttress, they painfully strove, by piling mass on mass, to withstand that weight of water which, when it rose, was yet too strong for them. We sympathize with them and their work (the more so that the river still flows below and may yet carry it away), and to save ourselves the trouble of defining our feelings we say that the bridge is picturesque. I do not know that it has been ever caricatured by the modern bridge-builder (the public, wisely enough, do not go for their bridges to those who delight in picturesque imperfections and decay); but, were he to copy it, the highest result he could reach would be that of spurious—false picturesque. He would be but calling upon men to sympathize with effort and perplexity he had never felt. Far better he should be true, nor pretend there is a difficulty, when he can, like a cunning spider, throw a suspension bridge (that most unpicturesque of objects) across.

Is picturesqueness, then, never to be aimed at in our designs? To this different men must make different answers. Leaving out of the question those who will reply, "The public like it—we must please our clients—let us put on our hook any bait that will attract moneyed customers and transfer some of their coin to our pockets"—leaving these on one side as animals that will follow any whither let others but show the way,—yet there will still remain a great diversity of opinion whether picturesqueness, even as I have defined it, is to be sought after or not. The feeling "Let us eat and drink, for to-morrow we die," is one that all men feel at times, and with some it is the main rule of life. Of course, in most if not all cases, the desire to be satisfied is something higher than mere bodily hunger or thirst; but, whether it be appetite for learning, fame, riches, power, or any other form of ideal happiness, the thought is still the same: "Let us satisfy such wants as we feel, nor create new wants for ourselves." Such men will naturally say "Let us build the picturesque, for our nature craves for it—it gives us pleasure." But if we consider the main object of our life—the one thing to be lived for—to be not the rendering happy the lives of our fellows while they exist, or the satisfaction of the existing wants of our race, but rather the advancement of that race to a higher level—in other words, the creation and cultivation of other and higher wants than those we now feel—wants which, though we may never be able to satisfy, those that follow us may—if we consider this, and if our main object and endeavor be to do this so far as in us lies in our art and handicraft, we shall (I think) leave on one side all thought of picturesqueness, of imperfection—all appealing to the sympathy of men—all endeavor to make our buildings harmonize with nature's flaws and raggedness (though we ourselves may be unable to help sympathizing with nature, and even liking its imperfections from association, for after all this is the only world we know; and, as Mrs. Croaker

observed, "we were never in a pleasanter place.") We shall rather, ever and always, even in the smallest things, aim at a certain nobility and beauty which is very difficult, nay almost impossible, to describe in words, but which we can each more or less imagine—what we call perfection. Neither is it necessary that perfection be more expensive than imperfection. We need not place delicate mouldings or elaborate framework on the doors of pigsties; we know that beauty does not consist in ornament, nor in the absence of ornament, but there is no reason why the designer of a pigstye should not aim at the grand, and not be content with the pretty—why there should not be even in it something of the four-squareness that delighted the Hebrew prophet. The most perfect modern buildings we have are warehouses and such like buildings, whose general design has been kept unbroken for the sake of economy, whereas it is usually considered of the greatest importance in designing a dwelling-house, even though it be but a gate-keeper's lodge, to get it "nicely broken up on plan." Some of the most beautiful old Gothic houses I know are at Cordes; and yet I do not recollect a single buttress to any one of them. Their facades are kept perfectly unbroken, save by doorway, window, and string-course, and appear to have been finished at the top with a straight cornice. They are certainly very beautiful; but such picturesqueness as they possess is a natural consequence of their being built on steeply rising ground, a site for which their designers are not responsible. They are, in fact, too perfect to be picturesque, as I understand the word.

Nor need we think that we are bidding farewell to the picturesque for ever, simply because we desist from seeking it. Our work must yet for many a long day speak of thwarted human effort. We shall not be able to build grandly or beautifully, simply because we desire to do so; but we may reach a higher beauty (or rather, since there is but one abstract beauty, reach nearer to beauty), than if we confine our efforts to designing that which shall only please our fellows, and claim their sympathy. "Who aims the sky shoots higher far than he who aims a tree," but he hits not his mark. And if we aim at perfect beauty it is certain we shall not attain it; but, at the worst, our buildings will have that true picturesqueness that comes when an unattainable ideal is aimed at; and in this they resemble the works of those of old.

Let us dismiss, then, from our designs all that speaks of imperfection, all that hints at future decay. Let us not delight in buttresses—they are at best but confessions of weakness—place no pinnacles upon tower or parapet to break the squareness of their outline against the sky—no spiky finials on gable ends, to look like baby lightning-conductors presenting arms at the clouds. Let breadth, and not break, be our aim. Let there be some repose about our buildings. Amid the feverish restlessness characteristic of nineteenth century life—at least let stone, our future coverlet, speak to us even now of rest.

FRED C. DESHON.

WHO CAN BEST BE SPARED?

Young men, this is the first question your employers ask themselves when business become slack and when it is thought necessary to economize in the matter of salaries. "Who can best be spared?" The barnacles, the shirks, the makeshifts, somebody's proteges, somebody's nephews, and especially somebody's good-for-nothing. Young men, please remember that these are not the ones who are called for when responsible positions are to be filled. Would you like to gauge your own future for a position of prominence? Would you like to know the probabilities of your getting such a position? Inquire within! What are you doing to make yourself valuable in the position you now occupy? If you are doing with your might what your hands find to do, the chances are, ten to one, that you will soon become so valuable in that position that you cannot be spared from it; and then, singular, to relate, will be the very time when you will be sought out for promotion to a better place.—PRINTING TIMES AND LITHOGRAPHER.

EDISON'S EXPLANATION OF THE AMPERE AND THE VOLT.

During a recent examination a lawyer put the following question to Thomas A. Edison:

"Explain what is meant by the number of volts in an electric current?" To which he replied:

"I will have to use the analogy of a waterfall to explain. Say we have a current of water and a turbine wheel. If I have a turbine wheel, and allow a thousand gallons per second to fall from a height of one foot on the turbine, I get a certain power, we will say one horse power. Now the one foot of fall will represent one volt of pressure in electricity, and the thousand gallons will represent the ampere or the amount of current. We will call that one ampere. Thus we have a thousand gallons of water or one ampere falling one foot or one volt or under one volt of pressure, and the water working the turbine gives one horse power. If, now, we go a thousand feet high, and take one gallon of water and let it fall on the turbine wheel, we will get the same power as we had before, namely, one horse power. We have got a thousand times less current or less water, and we will have a thousandth of an ampere in place of one ampere, and we will have a thousand volts in place of one volt, and we will have a fall of water a thousand feet as against one foot. Now the fall of water or the height from which it falls is the pressure or volts in electricity, and the amount of water is the amperes. It will be seen that a thousand gallons a minute falling on a man from a height of only one foot would be no danger to the man, and that if we took one gallon and took it up a thousand feet and let it fall down it would crush him. So it is not the quantity or current of water that does the damage, but it is the velocity or the pressure that produces the effect."—*Scientific American*.

Through the kindness of Mr. John M. Curtis, we herewith print the Law relating to party walls, etc., of the State of Louisiana. It is not presented as a model law, but as hints for the consideration of Architects and Builders, when Laws of this kind are about to be enacted for this State.

STATE LAW OF LOUISIANA.

PARTY WALLS, DITCHES, FENCES, ETC.

SECTION 1

He who first builds in the cities and towns, or their suburbs, of this State, may rest one-half of his wall on the land of his neighbor, provided he builds with stones or bricks, at least as high as the first story, and provided the whole thickness of this wall do not exceed eighteen inches, not including the plastering. But he cannot compel his neighbor to contribute to the raising of this wall.

SECTION 2

If the neighbor be willing to contribute for his half to the building of the wall thus raised, then this wall is a wall in common between the proprietors. The neighbor who has refused to contribute to the raising of this wall preserves still a right of making it a wall in common, by paying to the person who has made the advance, the half of what he has laid out for its construction, according to the rules hereafter established.

SECTION 3

Every wall which is a separation betwixt buildings as high as the upper part of the first story, or betwixt the yard and garden in the cities and towns, and their suburbs, of this State, and even any other enclosure in the fields, shall be presumed to be in common, if there be no title, proof or mark to the contrary.

SECTION 4

The repairs and buildings of walls in common are to be made at the expense of all who have a right to the same, and in proportion to their interests therein.

SECTION 5

Nevertheless every co-proprietor of a wall in common, may be exonerated from contributing to the repairs and rebuilding, by giving up his right of common; provided no building belonging to him be actually supported by the wall thus held in common.

SECTION 6

Every co-proprietor may build against a wall held in common, and cause beams or joists to be placed within two inches of the whole thickness of the wall, saving to the neighbor the right of diminishing with the chisel the length of the beam till it do not exceed the half of the thickness of the wall, in case he himself should wish to fix beams in the same place, or to build a chimney against it.

SECTION 7-

Every co-proprietor is at liberty to increase the height of the wall held in common, but he alone is to be at the expense of raising it and of repairing and keeping the part above the height of the wall in common, in good order; and besides he alone is liable for all expense arising from its being raised higher according to its value.

SECTION 8

If the wall held in common cannot support the additional weight of raising it, he who wishes to have it made higher, is bound to rebuild it anew entirely, at his own expense, and the additional thickness must be taken from his property.

A weak wall built by the owner of one lot, along and not over the dividing line between the two lots, may be demolished by the owner of the other lot in order to erect a strong common wall.

SECTION 9

The neighbor who did not contribute to the wall held in common, may cause the raised part to become common, by paying one-half the expense of such raising, and the value of the half of the soil employed for the additional thickness, if there is any.

SECTION 10

Every proprietor adjoining a wall has, in like manner, the right of making it a wall in common, in whole or in part, by reimbursing to the owner of the wall one-half of its value, or the half of the part which he wishes to hold in common, and one-half of the value of the soil upon which the wall is built, if the person who has built the wall has laid the foundation entirely upon his own estate.

SECTION 11

Neither of the two neighbors can make any cavity within the body of the wall held by them in common, nor can he affix to it any work without the consent of the other, or without having, on his refusal, caused the necessary precaution to be used, so that the new work be not an injury to the rights of the other, to be ascertained by persons skilled in building.

SECTION 12

Every one has a right to compel his neighbor within the cities and towns, and their suburbs, of this State to contribute to the making and repairing of the fences held in common, by which their houses, yards and gardens are separated, which shall be made in the manner which is or may be prescribed by the regulations of the police on this subject.

And if one of the proprietors has been alone at the expense of making the inclosure held in common, he may compel the other to make it in his town, and the presumption shall be that the inclosure was made by him on whose side it is nailed, unless there exists a voucher or proof to the contrary.

SECTION 13

In the country the common boundary inclosures between two estates are made at the expense of the adjacent estates, if the estates are enclosed; otherwise, the estate which is not inclosed is not bound to contribute to it.

Every fence, which separates rural estates is considered as a boundary inclosure, unless there be but one of the estates inclosed, or unless there be some title or proof to the contrary.

SECTION 14

Every ditch between two estates shall be supposed to be held in common, unless there be a voucher or proof to the contrary.

SECTION 15

A ditch held in common is to be kept at the expense of the two contiguous proprietors.

SECTION 16

Every proprietor in the cities, towns or suburbs of this State, is forbidden to plant on the boundary line which separates his estate from that of his neighbor, trees which may be of any injury whatsoever to his neighbor.

And if his neighbor suffers any damage from them, he can oblige the owner to have them torn up or the branches of them cut off, which extend over his estate.

If the roots only extend themselves on his estate, the neighbor has the right to cut them up himself.

NOTICE OF MEETINGS.

SAN FRANCISCO CHAPTER, AMERICAN INSTITUTE ARCHITECTS, meets second Friday of each month at Academy of Sciences Building.

SETH BABSON, Pres. W. J. CUTHBERTSON, Vice-Pres.
OLIVER EVERETT, Sec. JOHN M. CURTIS, Treas.

TECHNICAL SOCIETY OF THE PACIFIC COAST, meets first Friday of each month at Academy of Sciences Building.

JOHN RICHARDS, Pres. L. WAGONER, Vice-Pres.
OTTO VON GELDERN, Sec. GEO. F. SCHILD, Treas.

CALIFORNIA ELECTRICAL SOCIETY, meets the first and third Monday evening of each month at the Murphy Building.

W. C. QUIMBY, Pres. O. BROOKS, Vice-Pres.
C. E. PURINGTON, Sec. W. C. CROSETT, Treas.

BUILDERS' ASSOCIATION OF CALIFORNIA, meets every Monday at 330 Pine Street, Rooms 9-12, at 1:30 P. M.

S. H. KENT, Pres. A. JACKSON, Sec.
L. A. LARSEN, Clerk.

THE regular meeting of the San Francisco Chapter of the American Institute of Architects, was held in the new rooms, in the Academy of Sciences building.

By invitation, Mr. Wright, a quantity surveyor, explained the customs and usages of his profession as practiced in England, and gave his views as to the desirability of a similar system being adopted by the architects of this city.

THE regular meeting of the Technical Society of the Pacific Coast was held at their rooms, on the 6th inst. The subject for the evening was, "The Modern Theory of Ocean Waves," by Mr. A. W. Stahl, U. S. Navy.

AT the regular meeting of the California Electrical Society held at their rooms on the 16th inst., the subject of transmission of Power by Electricity was discussed. The subject for the next meeting to be held on the 6th of April, will be Submarine Mining by Electricity, by Mr. T. J. Allen.

UNDER the auspices of the Camera Club, a most interesting exhibition of views of the Yosemite Valley, was given on Feb. 26th. The lantern slides were made from photographs taken by the members of the Club. The lecturer gave a very vivid description of the beauties and wonders of the valley, as they were brought successfully before the eyes of the audience. The pictures sharply focused on the screen, frequently elicited applause and commendation, and the Club has reason to be pleased with the satisfaction expressed by its audience. Duplicate views of this series, have been made for exhibition and exchange with other clubs throughout the east and Europe. The Club proposes to give monthly exhibitions, including a complete tour of Europe, and the best work of the eastern societies. A new class of membership has been established by the Club, and known as subscribing members—for fifty cents per month dues, these members are entitled to four tickets to each exhibition.

OBITUARY.

CHARLES H. ACKERSON.

We regret to chronicle the death of Charles H. Ackerson, an old resident and a prominent contractor of this city. He was at one time the Chief Engineer of the San Francisco Fire Department.

LEGAL DECISIONS.

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

LIEN UNDER SEPARATE CONTRACTS AGAINST SAME OWNER.—The owner of two lots entered into two separate contracts with a builder for the erection of a house upon each. The builder entered into an entire contract with a material-man to furnish material for both. The sub-contractor filed a lien for the whole amount against both houses. Such a statement is invalid as a basis for lien against either lot, as it should have shown the specified facts necessary to give jurisdiction, with reference to each lot separately.

Knauff v. Miller, Supreme Court of Minnesota, 47 N. W. Rep. 313.

ABANDONMENT OF MECHANICS' LIEN.—Where a person who would otherwise be entitled to a mechanics' lien for materials furnished and used in the construction of a building, takes the notes of the owner secured by a chattel mortgage, he waives his lien, and his mortgage is subject to the mechanics' liens filed to secure debts arising out of the construction of the building.

Kendall Mfg. Co. v. Rundel, Supreme Court of Wisconsin, 47 N. W. Rep. 364.

PRIORITY OF MECHANICS' LIEN OVER VENDORS' LIEN.—Where a purchaser of real estate takes possession of it before the delivery of the deed, and with the full knowledge of the sellers, cause improvements to be made thereon without objection by the latter, and without notice by the latter to the contractors and material-men of their claim of title, the lien of the material-men and contractors is superior to the vendors lien for purchase price, and will be enforced as against the sellers as well as the purchaser.

Leonard V. Cook, Court of Chancery of New Jersey, 20 At. Rep. 855.

FLOWAGE FROM WATER SPOUTS.—It constitutes a trespass to so construct a building that the system of water spouts for carrying away the water which falls on the roof is arranged in such a manner that the water collected thereby is discharged upon the land of another.

Conner v. Woodfill, Supreme Court of Indiana, 25 X. X. N. E. Rep. 876.

BUSINESS MOSAICS.

Notice of the removal of the West Coast Wire and Iron Works, Smith and Trowbridge proprietors, from their old quarters 11 Drumm St., to that large and commodious brick building, Nos. 13 and 15 Spear St., near Market St. San Francisco, two blocks from ferry landing, has been received at our office.

This change has been necessitated on account of continuously increasing patronage, their business especially during the year just ended, having entirely out-grown the capacity of the old factory. The new quarters have fully quadruple the manufacturing capacity of the old works. They have greatly improved, and added to the manufacturing plant in every branch of Wire Working with the especial aim of excelling in the manufacture of every product pertaining to the wire working industry. They have also developed and perfected facilities for the manufacture of every description of useful and ornamental Metallic, Scroll and Grill Work, now coming so generally into use by bankers and others fitting out large and elegant offices.

Store Fixtures, Nickel Plated, Polished Brass and Bronzed Iron, will receive careful attention.

The Architectural Iron Works department will be developed and prosecuted more vigorously than heretofore, and will include the manufacture of the usual variety of Builders' Supplies in their line, such as Wrought Iron Fencing and Railing, Fire Escape Balconies and Ladders, Areal Grating and Iron Stairs, Iron Shutters and Doors, Roof Cresting, Finials and Tower Ornaments, also Cemetery and Lawn Furniture.

A Retail Store and Sample Show-room will adjoin the works, and a large stock of every grade of Iron, Steel, Brass and Copper, Wire Cloth and Galvanized Twist Wire-Netting, will be kept constantly on hand to supply the demand of the retail trade.

Furniture should harmonize with the general decorative features of the apartment.

Elegance and beauty of design and workmanship for furniture always commends itself to those who are able to appreciate the better class articles. This fact has been kept in view by the West Coast Furniture Co., L. and E. Emanuel, in their extensive business.

The furniture furnished by this firm for the ordinary rooming house and hotel purpose has a substantial and chaste make up, which is appreciated by the buyer. Their furniture for the better class houses, and the fittings for banks and offices show a high degree of art workmanship, great care being taken in the selection of the shades and grains of the different woods to obtain harmonious effects.

The Western Iron Works has been known for many years as one of the most reliable wrought iron works on the coast.

Their prison work, fire and burglar proof doors, shutters etc., have successfully withstood the test of time; and are at present the representative works in their line.

It is an interesting fact just now for purchasers although not probably gratifying to makers of galvanized sheets, that the latter are netting American makers less for guaranteed sheets No. 27 gauge than imports are getting for guaranteed brands of terne, or tin, roofing plates.

Galvanized sheets of No. 27 gauge also have the advantage of being heavier than terne plates as to the original sheets used, and as to the coating thus rendering them far more substantial and durable.

As galvanized sheets are also much larger in size they are not only much more economical to apply but also far more effective for roofing.

Metal roofers should note this and profit by it, especially for guttering and spouting. Persons interested in metal covering will please note the removal of the offices of THE CINCINNATI CORRUGATING CO. to 39 and 90 Johnston Building, Cincinnati, Ohio, where they will be pleased to give information and estimates on their specialties, Iron and Steel Roofing and Siding, Arches, Lath, etc. Black and Galvanized Iron and Steel Sheets of their own manufacture.

GALVANIZED VERSUS TINNED SHEETS.

CITY BUILDING NEWS.

Baker near Washington. One-story cottage; owner, N. King; architect, Samuel Newson; contractor, McMillan & Maurer; cost, \$2,750; signed, Jan. 31; filed, Feb. 2; payments, \$412; frame up; \$112, ready for lathing; \$112, brown mortared; \$112, plastered; \$112, completed; \$600, 35 days.

Bay near Mason. Carpenter work; owner, Henry E. Bothin; architect, J. Cather Newson; contractor, M. S. Yerxa; cost, \$7,400; signed, Feb. 27; filed, March 2; payments, \$625, first floor joists in place; \$1,500, rough frame up; \$1,000, enclosed; \$1,500, brown mortar on; \$225, accepted; \$1,550, 35 days.

Between Ocean View and Lake Merced. Grading; owners, Spring Valley Water Works; contractor, C. A. Warren; cost, 16 cents per cubic foot; signed, Feb. 14; filed, Feb. 16; payments, 75 per cent. as work progresses; 25 per cent. 35 days.

Buchanan near Green. Brick work; owner, H. W. Muller; architect, S. Hatfield; contractor, Allan Macdonald; cost, \$2,425; signed, Feb. 7; filed, Feb. 10; payments, \$125, frame up; \$175, brown mortar on; \$175, plastered; \$450, completed; \$600, 35 days.

Bush near Taylor. Alterations; owner, Mrs. C. B. Gregory; architect, C. I. Havens; contractor, Thos. Maxwell; cost, \$2,400; signed, Feb. 14; filed, Feb. 16; payments, \$700, foundation laid; \$700, hard finish; \$712, completed; \$750, 35 days.

Bush near Gough. Additions; owner, Mary Newman; architect, M. Wharf; cost, \$7,000; day work.

Cherubino near Coso. 1-story cottage. Owner, Martin Spellman; contractor, Jos. H. Millard; cost, \$700; signed, Feb. 2; filed, Feb. 7; payments, \$250, outside frame up; \$320, roof shingled; \$230, 35 days.

Columbia near Folsom. 2-story building; owner, Thos. Bertram; architects, Townsend & Wyneken; contractor, C. E. Gody; cost, \$2,200; signed, Feb. 5; filed, Feb. 6; payments, \$30, which frame is up; \$70, 1 coat of paint on; \$70, all bills shown received.

Cor. Block 35, Mission St. To build; owner, Thos. Magee; architect, C. K. Kirby; contractor, A. L. Campbell; cost, \$24,750; signed, Feb. 17; filed, Feb. 17; payments, \$215, brick foundations; \$3215, second story joists in; \$3,215, frame up; \$3,215, enclosed; \$3,215, exterior finished and brown mortared; \$3,222, completed; \$6,468, 35 days.

Cor. Chalfonts & 21th. Alterations; owner, Louis F. Dunand; architect, John T. Kidd; contractor, B. J. Malone; sureties, L. T. Lewis and T. Richardson; guaranteed, cost, \$2,075; signed, Jan. 26; filed, Feb. 2; payments, \$375, house raised; \$380, enclosed; \$412, brown mortared; \$250, completed; \$515, 35 days.

Cor. Davis & Sacramento. Repairs; owner, S. Waugenheim; architect, J. E. Wolfe; contractors, Farrell & Bell; cost, \$1,100; signed, Feb. 10; filed, Feb. 11; payments, 75 per cent. as work progresses; 25 per cent. 35 days.

Cor. Filbert & Sansome. Brick work; owner, Kate Johnson; architects, Wright & Sanders; contractors, Kiley & Lane; cost, \$3,100; signed, Feb. 27; filed, Mar. 5; payments, 75 per cent. as work progresses; 25 per cent. 35 days.

Cor. Filbert & Sansome. Carpenter work; owner, Kate Johnson; architects, Wright & Sanders; contractor, J. W. Wisinger; cost, \$37,675; signed, Feb. 27; filed, Mar. 5; payments, 1st day of each month 75 per cent. as work progresses; 25 per cent. 35 days.

Cor. Front & Clark. Brickwork; owner, Henry T. Bray; architects, J. J. & T. D. Newson; contractor, Geo. Neagle; cost, \$2,250; signed, Feb. 11; filed, Feb. 12; payments, \$300, brick walls up to 3rd story; \$325, walls up to roof; \$325, finished; \$325, completed; \$775, 35 days.

Cor. Leavenworth & California. Frame building; owner, Fred Derringer; architect, F. A. Sola; contractor, Henry Rohling; cost, \$4,500; signed, Feb. 12; filed, Feb. 12; payments, \$1,140, roof on; \$1,140, brown mortar on; \$1,140, completed; \$1,140, 35 days.

Cor. Market and Second. Plastering; owner, A. C. Hussey; architect, Albion C. Hussey; contractor, John L. Crichton; cost, \$6,554; signed, March 4; filed, March 5; payments, 25 per cent. 1-3 done; 25 per cent. 2-3 done; 25 per cent. completed; 25 per cent. 35 days.

Cor. Market and City Hall Avenue. Cabinet work; owners, H. J. Techan & Co.; architect, H. J. Techan; contractor, John Quait; cost, \$1,270; signed, Jan. 27; filed, Feb. 6; payments, \$1,270, when accepted by owner.

Cor. Market and City Hall Avenue. Painting; owners, H. J. Techan & Co.; architect, H. J. Techan; contractor, John Quait; cost, \$1,200; signed, Jan. 8; filed, Feb. 6; payments, 75 per cent. when completed; 25 per cent. 35 days.

Cor. Market and Montgomery. Terra Cotta Work; owners, Crocker Estate Co.; architect, A. Page Brown; contractors, Union Pressed Brick Co.; cost, \$25,250; signed, May 2, 1890; filed, Feb. 25.

Cor. Market & Montgomery. Vault Work; owners, Crocker Estate Co.; architect, A. Page Brown; contractors, Hall Safe & Lock Co.; cost, \$22,300.50; signed, Jan. 5; filed, Feb. 25.

Cor. Montgomery & Sacramento. Carpenter work; owners, Pacific Mutual Life Insurance Co.; architects, Wright & Sanders; contractors, Day & McLachlan; cost, \$30,800; signed, Feb. 17; filed, Feb. 24; payments, 1st day of each month as work progresses; 25 per cent. 35 days.

Cor. Oak & Buchanan. Carpenter work; owner, W. T. Wenzell; architect, Chas. I. Havens; contractor, Robert Currie; cost, \$4,500; signed, Feb. 18; filed, Feb. 20; payments, \$850, frame up; \$850, brown mortar on; \$850, hard finish on; \$850, accepted; \$1,150, 35 days.

Cor. Pacific & Broderick. Heaters; owner, Robert A. McLean; architect, A. Page Brown; contractors, Harvey Heating Co.; cost, \$1,450; signed, Feb. 10; filed, Feb. 12; payments, 1st day of each month 75 per cent. as work progresses; 25 per cent. 35 days.

Cor. Pacific & Octavia. Carpenter work; owner, G. L. Lansing; architects, Smith & Freeman; contractor, S. H. Kent; surety, guaranteed by W. J. Adams; cost, \$9,308; signed, Feb. 6; filed, Feb. 13; payments, \$1,620, frame up; \$1,200, ready for plaster; \$1,200, plastered; \$1,500, ready for painters; \$800, completed; \$2,495, 35 days.

Cor. Page and Gough. Carpenter work; owner, Peter Dean; architect, Max G. Bugbee; contractor, S. G. Buzzell; cost, \$14,400; signed, Jan. 13; filed, Feb. 4; payments, 1st day of each month, 75 per cent. as work progresses; 25 per cent. 35 days.

Cor. Page and Gough. Brickwork; owner, Peter Dean; architect, Max G. Bugbee; contractor, Wald Tarp; cost, \$7,300; signed, Jan. 13; filed, Feb. 4; payments, 1st day of each month, 75 per cent. as work progresses; 25 per cent. 35 days.

Cor. Potrero Ave. and Twenty-fourth. Two-story building; owner, Nicholas Orlandi; architect, Henry Geilfuss; contractors, Tegeler & Muller; cost, \$1,100; signed, Feb. 18; filed, March 4; payments, \$700, frame up; \$700, brown mortar on; \$700, inside finish on; \$1,024, 35 days.

Cor. Powell & Vallejo. Three stores and Tenements; owner, J. J. Harrigan; architect, Wm. H. Wharf; contractor, Geo. Rickley; surety, F. Joest, \$1,075; signed, Feb. 4; filed, Feb. 14; payments, \$1,000, frame up; \$1,000, roof tinned; \$1,100, brown coat on; \$110, white coat on; \$150, completed; \$2,000, 35 days.

Cor. Powell & Vallejo. Brickwork; owner, J. J. Harrigan; architect, Wm. H. Wharf; contractor, Benj. Turner; surety, \$400; cost, \$1,143; signed, Feb. 4; filed, Feb. 14; payments, 75 per cent. as work progresses; 25 per cent. 35 days.

Cor. Turk & Hyde. Stone work; owner, D. Van Ness; architect, H. Geilfuss; contractor, J. O. Sullivan; cost, \$2,135; signed, Feb. 27; filed, Mch. 2; payments, 1st and 15th day of each month, 75 per cent. as work progresses; 25 per cent. 35 days.

Cor. Twelfth & Kissling. 2-story building; owner, John O'Keefe; architect, S. Hatfield; contractor, Allan Macdonald; cost, \$1,900; signed, Feb. 13; filed, Feb. 16; payments, \$357, foundation laid; \$356, brown mortar on; \$356, plastered; \$356, completed; \$475, 35 days.

Cor. Sixth and Minna. Concrete work; owner, Wm. Plums; architect, H. Geilfuss; contractors, Chadian Giletti Stone Co.; cost, \$1,500; signed, Feb. 18; filed, Feb. 26; payments, 75 per cent. as work progresses; 25 per cent. 35 days.

Cor. Sixteenth and Valencia. Brickwork; owner, G. Campbell; architect, C. R. Kirby; contractor, D. J. Brennan; cost, \$2,517; signed, Feb. 24; filed, Feb. 25; payments, \$1,500, foundation laid; \$500, chimneys finished; \$517, completed.

Cor. Twenty-fifth and Mission. Three-story frame; owner, Gustave Hueber; architects, John & Balczynski; contractors, Schutt & Kraker; cost, \$2,000; signed, Jan. 31; filed, Feb. 2; payments, \$2,500, frame up; \$2,000, partitions set; \$2,000, white coat of plaster on; \$2,725, completed; \$3,075, 35 days.

Cor. Twenty-fifth and Mission. Brickwork; owner, Gustave Hueber; architects John & Balczynski; contractor, Jacob Wagner; cost, \$1,500; signed, Jan. 31; filed, Feb. 2; payments, \$700, walls finished; \$470, chimneys up; \$300, 35 days.

Eddy near Taylor. Brick building; owner, J. A. Bergerot; architects, C. R. & J. M. Wilson; contractor, Jno. McCarthy; sureties, R. McCann & J. P. M. Phillips; \$10,000; cost, \$20,000; signed, Feb. 4; filed, Feb. 17; payments, \$3,000, first-story wall up; \$3,000, second-story wall up; \$3,000, brick work done; \$3,000, iron work done; \$3,000, completed; \$5,000, 35 days.

Eddy near Taylor. Carpenter work; owner, J. A. Bergerot; architects, C. R. & J. M. Wilson; contractors, Childs & Chatham; sureties, A. E. Fraser and Dina Chatham; \$3750; cost, 15,000; signed, Feb. 14, filed, Feb. 13; payments, \$300, roof on; \$300, brown mortar on; \$300, inside finish on; \$250, completed; \$3750, 35 days.

Ellis near Powell. Steam and Electric Plant; owner, Claus Mangels; architect, H. Geilfuss; contractors, Parsons Construction Co.; cost, \$6000; signed, Feb. 18; filed, Mch. 4; payments, 75 per cent. as work progresses; 25 per cent. 35 days.

Fair Oaks near Twenty-second. 2-story frame; owner, G. M. Lawton; architect, G. M. Lawton; contractor, F. W. Kern; surety, O. W. Nordwell; \$837.50; cost, \$3,350; signed, Feb. 21; filed, Mch. 2; payments, \$837.50, frame up; \$837.50, plastered; \$837.50, accepted; \$837.50, 35 days.

Fell near Polk. Raising and Additions; owner, F. J. McGovern; architects, Townsend & Wyneken; contractor, Jas. Campbell; cost, \$2700; signed, Feb. 10; filed, Feb. 10; payments, \$675, raised and enclosed; \$675, plastered; \$675, completed; \$675, 35 days.

Fifth Ave. To build; owner, Margaret E. Sturberland; contractor, Wm. F. Fetzell; cost, \$1504; signed, Feb. 13; filed, Feb. 16; payments, \$250, brick walls up; \$200, frame up; \$450, brown mortar on; \$400, plastered; \$294, ready for occupancy.

Folsom near Twentieth. Frame building; owner, Josie E. Niven; contractor, Lemuel Arthur; cost, \$2100; signed, Feb. 24, filed, Mch. 3; payments, \$800, frame up; \$800, brown mortar on; \$308, hard finish on; \$575, completed; \$1025, 35 days.

Folsom near Creek Lane. Frame building; owner, Mary A. Sullivan; contractor, H. R. Schmuckert; sureties, F. Smith and P. Amiraux; \$6,500; cost, \$6,100; signed, Feb. 24; filed, Mch. 2; payments, \$1300, frame up; \$1300, brown mortar on; \$1300, hard finish on; \$1030, accepted; \$1040, all bills paid.

Franklin near Broadway. Stairs, etc.; owner, Mahony Bros. architects, Shea & Shea; contractor, Henry McMahon; cost, \$1095; signed, Feb. 2; filed, Feb. 3; payments, 75 per cent. as work progresses; 25 per cent. 35 days.

Front near Clark. Additions; owner, W. C. Hilderbrandt, et al.; architect, J. J. Newson; contractor, Henry T. Bray; cost, \$6750; signed, Feb. 4; filed, Feb. 5; payments, \$600, frame set; \$674, walls up; \$674, brick work; \$600, cornice work; \$674, plumbing in; \$600, inside work; \$1274, plastered; \$1700, 35 days.

Gibbs Place near Kearney. Woodwork; owner, Magdalena Iis; contractor, F. Klatt; cost, \$5,192; signed, Feb. 17; filed, Feb. 28; payments, \$500, second floor joists in; \$750, third floor joists in; \$1,000, roof on; \$1000, brown mortar on; \$644, completed; \$1,298, 35 days.

Gibbs Place near Kearney. Brickwork etc.; owner, Magdalena Iis; contractor, Riley & Loupe; cost, \$2,175; signed, Feb. 17; filed, Feb. 27; payments, \$600, ready for second floor joists; \$650, ready for third story joists; \$3335, completed; \$545, 35 days.

Golden Gate Park. Strawberry Hill. Concrete work; owner, Thos. W. Sweeney; architects, Percy & Hamilton; contractors, Ransom & Cushing; cost, \$8,000; signed, Feb. 9; filed, Feb. 10; payments, on the first Saturday of each month 75 per cent. as work progresses; 25 per cent. 35 days.

Green near Buchanan. Repairs; owner, Isaac Hecht; architect, Thos. E. Wilcox; contractors, Geo. Davis & Son; sureties, Geo. Jarvis and A. W. Sturdivant; \$3,775; cost, \$3,775; signed, Jan. 10; filed, Feb. 19; payments, \$1,100, building in position; \$1,331, completed; \$343.75, 35 days.

Green near Powell. Two-story frame; owner, Antonio Avanzino; architect, Chas. M. Rosseau; contractor, Emanuel Balgero; sureties, Jno. and Michael Perata; \$4,000; cost, \$4,480; signed, Feb. 18; filed, Feb. 19; payments, \$1,120, roof on; \$1,120, brown mortar on; \$1,120, completed; \$1,120, 35 days.

Grove near Octavia. Two-story frame; owner, F. Gusto; architect, W. K. Dobson; contractor, Geo. Balon; cost, \$1,175; signed, Feb. 3; filed, Feb. 5; payments, \$375, frame up; \$400, second coat of plaster on; \$400, 35 days.

Hayes near Fillmore. Three-story frame; owner, Mrs. M. A. Joy; architects, Percy & Hamilton; contractor, Silas Carlo; cost, \$6,500; signed, Feb. 20; filed, Feb. 23; payments, \$2,500, roof on; \$2,000, plastered; \$2,000, 35 days.

Hickory Ave. near Laguna. One-story frame; owner, Patrick Powell; architect, the owner; contractor, Jas. Campbell; cost, \$1,400; signed, Feb. 28; filed, March 4; payments, \$625, enclosed; \$725, hard finish on; \$550, 35 days.

Hickory Ave. near Franklin. Alterations; owner, Mrs. Anna Cordes; architect, S. Hatfield; contractor, E. C. Warden; cost, \$1,341; signed, Feb. 2; filed, March 4; payments, \$675, ready for lathing; \$675, completed; \$683.25, 35 days.

Jones near Geary. Three-story frame; owner, E. B. Reynolds; architect, Emilio Deperiere; contractor, J. J. Dunn; sureties, C. S. Holmes and Behrend Joest, \$1,400; cost, \$1,600; signed, Feb. 19; filed, Feb. 27; payments, \$1,100, frame up; \$1,100, brown mortar on; \$1,000, plastered; \$1,000, completed; \$1,400, 35 days.

Lake Merced. Grading pumping station. Owners, Spring Valley Waterworks; contractor, C. A. Warren; cost, 16 cents per cubic foot; signed, February 14; filed, February 15; payments, 75 per cent. as work progresses; 25 per cent. 35 days.

Lyon near Grove. Two-story frames; owner, Geo. Witman; architects, Shea & Shea; contractors, Thos. Elam; sureties, C. D. McGowan & Co. and F. G. Norman; cost, \$3,400; signed, February 18; filed, February 20; payments, \$54, rough frame up; \$54, brown mortar on; \$54, hard finish on; \$55, completed; \$573, 35 days.

Market near Montgomery. Carpenter work; owner, Rhody Ringrose; architect, J. C. Newson; contractor, W. Plums; cost, \$3,150; signed, February 4; filed, February 6; payments to be made at stated times.

Market near Montgomery. Brick, stone and terra cotta work; owners, M. J. and F. H. Burke; architect, J. Cather Newson; contractor, Rhody Ringrose; sureties, O. Lewis and W. Plums; \$3,000; signed, January 28; filed, January 30; payments, \$2,000, first floor joists in; \$1,245, second floor joists in; \$1,245, roof on; \$1,245, brown mortared; \$1,245, plastered; \$1,247.50, completed; \$2,742.50, 35 days.

Market near Montgomery. Stone work; owner, Rhody Ringrose; architect, J. Cather Newson; contractor, Fred Westphal; cost, \$1,440; signed, January 30; filed, Feb. 28; payments, 75 per cent. as work progresses; 25 per cent. 35 days.

Market near Seventh. Plumbing; owner, Mrs. M. J. Lemmon; architect, C. I. Havens; contractors, Duffy Bros.; cost, \$1,400; signed, Feb. 28; filed, Feb. 28; payments, 1st day of each month, 75 per cent. as the work progresses; 25 per cent. 35 days.

Mission near Tenth. Carpenter work; owner, Allan Macdonald; architect, F. T. Poolan; contractor, F. T. Poolan; surety, J. J. McKinnon; cost, \$3,350; signed, Feb. 20; filed, Feb. 21; payments, \$2,087.50, frame up; \$2,087.50, brown mortar on; \$2,087.50, completed; \$2,087.50, 35 days.

No. 110 San Jose Ave. Alterations; owner, John Anderson; architects, Townsend & Wyneken; contractor, S. E. Waldeck; cost, \$1,308; signed, Feb. 12; filed, Feb. 13; payments, \$450, building raised; \$450, brown mortar on; \$500, completed; \$457, 35 days.

No. 117 and 119 California Street. Brickwork; owner, Kingan & Co.; architect, J. M. Curtis; contractor, J. Haaf; surety, M. R. Krigbaum; \$4,000; cost, \$3,550; signed, Feb. 26; filed, March 4; payments, 75 per cent. as work progresses; 25 per cent. 35 days.

Oak near Scott. Carpenter work; owner, Emil Quarq; architect, Jas. E. Wolfe; contractor, Carl Stroth; sureties, F. Joest and Wm. Dasmann; \$2,300; cost, \$2,700; signed, Feb. 4; filed, Feb. 7; payments, \$775, foundation set; \$850, roof completed; \$1,000, brown mortar on; \$550, white on; \$800, completed; \$1,425, 35 days.

Oak near Clayton. 2-story frame; owner, N. M. Lund; architects, R. H. & R. White; contractor, Wm. Plums; sureties, David Wener and F. Joest, \$1,100; cost, \$4,420; signed, Feb. 21; filed, Feb. 24; payments, \$825, frame up; \$825, brown mortar on; \$825, standing finish on; \$825, accepted; \$1,120, 35 days.

Pacific Ave. near Central Ave. 2-story frame; owner, E. T. Sheppard; contractor, W. E. Lane; cost, \$4,250; signed, Feb. 27; filed, March 2; payments, \$736.25, frame up; \$736.25, enclosed; \$736.25, brown mortar on; \$736.25, completed; \$1,065, 35 days.

Park Lane Tract. One-story frame; owner, Hugh Foley; architect, Gust. Pavel; contractor, Gust. Pavel; cost, \$1,865; signed, Feb. 28; filed, Feb. 28; payments, \$450, frame up; \$450, brown mortar on; \$450, accepted; \$450, 35 days.

Post near Lyon. Two-story dwelling; owner, Jno. Lynott; architect, Jno. Lynott; contractor, Ozias D'Amis; cost, \$3,700; signed, Feb. 18; filed, Feb. 18; payments, \$800, frame enclosed; \$1,000, brown mortar on; \$925, completed; \$775, 35 days.

Pacific Ave. near Webster. Carpenter work; owner, Althea Walker; architects, Smith & Freeman; contractor, F. W. Kern; cost, \$11,575; signed, Feb. 27; filed, March 5; payments, \$1,736, frame up; \$1,736, enclosed; \$1,736, ready for plaster; \$1,000, plastered; \$1,736, ready for painter; \$737, completed; \$2,894, 35 days.

Pacific Ave. near Webster. Plumbing; owner, Althea Walker; architects, Smith & Freeman; contractors, Duffy Bros.; cost, \$1,875; signed, Feb. 27; filed, March 5; payments, \$800, rough plumbing in; \$606, completed; \$469, 35 days.

Page near Gough. Additions to three houses; owner, J. Nikles; architects, Mooser & Cuthbertson; cost, \$1,000; days work.

Powell near Sacramento. Plastering; owner, V. Menesini; architects, C. & J. Wilson; contractor, M. Kieruan; cost, \$2,800; signed, Feb. 4; filed, Feb. 5; payments, \$1,000, brown plaster on; \$1,000, white plaster on; \$400, completed; \$700, 35 days.

Sacramento near Kearney. Brick building; owners, Pierre Gavard and wife; architects, Pissis & Moore; contractor, W. M. Fletcher; cost, \$7,500; signed, Feb. 3; filed, Feb. 11; payments, \$1,400, first floor joists in; \$1,400, second floor joists in; \$1,237.50, roof and brickwork finished; \$1,912.50, 35 days.

Sacramento near Kearney. Brickwork; owner, Wm. M. Fletcher; architects, Pissis & Moore; contractor, D. J. Brennan; cost, \$2,880; signed, Feb. 6; filed, Feb. 12; payments, \$936, first floor joists in; \$936, second floor joists in; \$936, brickwork completed; \$1,070, 35 days.

Seventeenth near Diamond. Two-story dwelling; owner, Wm. Kennedy; architect, M. J. Welsh; contractors, David Cullinane & Bros.; sureties, Harris & Jones; \$2,000; cost, \$2,175; signed, Jan. 29; filed, Jan. 30; payments, \$543.75, frame up; \$543.75, brown mortared; \$543.75, completed; \$543.75, 35 days.

Sixteenth near Sanchez. Three-story building; owner, E. L. Ast; architect, Casper Zwierlein; contractor, Casper Zwierlein; cost, \$5,842; signed, Feb. 10; filed, Feb. 12; payments, \$1,088, frame up; \$1,088, brown mortar on; \$1,087, white coat on, and outside finish up; \$1,087, completed; \$1,150, 35 days.

Sixth near Minna. Additions; owner, Jeremiah Mahoney; architect, M. J. Welsh; contractor, D. Currie; cost, \$2,185; signed, Feb. 19; filed, Feb. 19; payments, \$232.35, foundation in; \$232, completed; \$458.75, 35 days.

Steiner near Haight. One-story frame; owner, Mrs. Margaret Alex; architects, Huene & Everett; contractor, Geo. Reichley; surety, Berend Joest, \$625; cost, \$2,500; signed, Feb. 3; filed, Feb. 4; payments, \$625, enclosed; \$625, brown mortared; \$625, completed; \$625, 35 days.

Steiner near Oak. Carpenter work; owner, Fritz Guckes; architect, H. Geilfuss; contractors, Ryeler & Muller; cost, \$1,850; signed, Feb. 14; filed, Feb. 14; payments, \$1,212, frame up; \$1,212, enclosed; \$1,212, completed; \$1,214, 35 days.

Sutter near Webster. Plumbing, etc.; owner, Mary A. Cotton; architect, P. R. Schmidt; contractors, Duffy Bros.; cost, \$1,475; signed, Feb. 3

Bay Vista and Oakland Ave., Oakland. To build; owner, J. P. Garlick; architects, A. W. Pattiani & Co.; contractors, A. W. Pattiani & Co.; cost, \$1,767; signed, Feb. 17; filed, Feb. 24; payments, \$1,300, rustic and shingles on and chimneys built; \$1,200, brown mortar on; \$1,067, completed; \$1,200, 35 days.

roadway near Lincoln Ave., Alameda. Six-room cottage; owner, Frank J. Krauth; architect, C. W. McKenna; contractors, McKenna & McKenna; cost, \$2,100; signed, Feb. 21; filed, Feb. 21; payments, \$300, frame up; \$500, brown mortar on; \$500, completed; \$500, 35 days.

dway near Ninth, Oakland. Carpenter work, etc.; owner, L. Friedmann; architects, Safford & Kohlberg; contractor, Alfred W. Burrell; cost, \$6,235; signed, Feb. 19; filed, Feb. 27; payments, \$1,000, roof on; \$1,000, floors laid; \$1,000, brown mortar on; \$675, floors hung; \$1,000, completed; \$1,560, 35 days.

Broadway near Ninth, Oakland. Brick, stone and terra cotta work; owner, L. Friedmann; architects, Safford & Kohlberg; contractor, Alfred W. Burrell; cost, \$3,160; signed, Feb. 19; filed, Feb. 27; payments, \$750, ready for floor joists; \$750, ready for ceiling joists; \$800, completed; \$800, 35 days.

Broadway near Ninth, Oakland. Cast and wrought iron work; owner, L. Friedmann; architects, Safford & Kohlberg; contractors, Johnson Manufacturing Co.; cost, \$1,952; signed, Feb. 19; filed, Feb. 27; payments, 75 per cent. after columns and girders are set; 25 per cent. 35 days.

Broadway near Ninth, Oakland. Plumbing and gasfitting; owner, L. Friedmann; architects, Safford & Kohlberg; contractors, Johnson Manufacturing Co.; cost, \$1,200; signed, Feb. 19; filed, Feb. 27; payments, \$600, rough work in; \$300, completed; \$300, 35 days.

Cameron Tract, Brooklyn. Two-story frame; owners, Minna E. Wilson and husband; architect, Geo. A. Bordwell; contractor, C. L. Lombard; cost, \$3,940; signed, Feb. 27; filed, Feb. 28; payments, \$700, frame up; \$850, brown mortar on; \$750, plastered; \$850, completed; \$850, 35 days.

Corner Jackson and Seventh streets, Oakland. Alterations and additions; owner, Charles Purrell; contractors, Dowling & Rettig; cost, \$2,075; signed, Feb. 13; filed, Feb. 14; payments, \$500, building raised and frame of new story erected; \$650, brown mortar on; \$500, plaster; \$575, 35 days.

Daly's Scenic Park, Berkeley. Two-story frame; owner, H. I. Coon; architects, Huerne & Everett; contractor, Herbert Kendell; cost, \$2,715; signed, Feb. 20; filed, Feb. 20; payments, \$200, rustic on and roof shingled; \$300, floors laid and roof shingled; \$510, brown mortar on; \$510, 35 days.

Eight street near Washington, Oakland. Alterations, etc.; owner, W. J. Dingee; contractors, W. T. Veitch & Co.; cost, \$2,300; signed, Feb. 6; filed, Feb. 7; payments, 75 per cent. on the first day of each month as work progresses; 25 per cent. 35 days.

Eight Ave. near Eighteenth street, Oakland. Two-story dwelling; owner, Geo. H. Fowler; architect, Geo. W. Flick; contractor, Geo. W. Flick; cost, \$2,550; signed, Feb. 27; filed, March 4; payments, \$637, frame up; \$637, brown mortar on; \$637, completed; \$637, 35 days.

Eleventh Ave. near Clinton Town, Oakland. Three dwellings; owner, Frank Euch; architect, Elmer Childs; contractor, G. H. W. Deike; cost, \$7,100; signed, March 5; filed, March 5; payments, \$1,500, lumber on ground; \$1,550, frame up; \$1,857, 35 days.

Ellis and Mason streets, Oakland. Dwelling and barn; owner, Honore D. Irwin; contractors, Dirksen & Roust; cost, \$3,090; signed, Feb. 7; filed, Feb. 11; payments, \$750, enclosed and roof on; \$750, hard finish on; \$750, completed; \$750, 35 days.

Fifth street near Magolia, Oakland. To build; owner, Jas. McLean; architect, Jno. Conant; contractor, Jno. Conant; cost, \$1,962; signed, Feb. 7; filed, Feb. 10; payments, \$100, frame up; \$400, ready for plaster; \$100, plastered; \$400, building ready for painters; \$362, 35 days.

Forty-first street near Grove, Temescal. Two cottages; owner, L. Serda; architect, Wm. Kirk; contractor, P. G. MacIntyre; cost, \$2,270; signed, March 2; filed, March 2; payments, \$600, frames up and brick work done; \$300, brown mortar on; \$770, completed; \$600, 35 days.

Golden Gate Tract, Golden Gate. One-story cottage; owner, Frank Richardson; architect, Lombard; contractors, F. M. Cramer & Co.; cost, \$1,700; signed, Feb. 16; filed, Feb. 16; payments, one-third, building enclosed and chimneys up; one third, completed; one-third, 35 days.

Hamilton Tract, Oakland. To build; owner, A. Steffani; architect, F. C. Bignami; contractor, F. C. Bignami; cost, \$1,570; signed, Feb. 28; filed, Feb. 28; payments, \$1,142, frame up; \$1,142, brown mortar on; \$1,142, 35 days.

Jones Street near Telegraph avenue, Oakland. Frame cottage; owner, Minna Frey; architect, Julius Frey; contractor, B. K. Allen; cost, \$1,585; signed, Feb. 23; filed, March 2; payments, \$500, frame up, roof on; \$400, brown mortar on; \$685, completed.

Lafayette street near R. R. avenue, Alameda. To build; owner, Geo. T. Wright; architects, A. W. Pattiani & Co.; contractors, A. W. Pattiani & Co.; cost, \$2,400; signed, Feb. 28; filed, March 4; payments, \$700, rustic and roof on and chimneys built; \$600, brown mortar on; \$500, completed; \$600, 35 days.

Linda Vista Terrace Tract, Oakland. Grading streets; owner, Chas. Camden; contractor, M. L. Gray; signed, Jan. 28; filed, Feb. 3; payments, 15th and 30th of each month, 75 per cent. of work done; 25 per cent. 35 days.

Linda Vista Terrace, Oakland. Two-story frame dwelling; owner, J. C. Hill; architect, Geo. A. Bordwell; contractors, Knight & Littlefield; cost, \$3,125; signed, Feb. 17; filed, Feb. 19; payments, \$750, frame raised and secured; \$750, plastered; \$750, completed; \$750, 35 days.

Mountain View Cemetery. Burial vault; owner, Mrs. Hannah Adams; architect, Walter J. Matthews; contractors, Hanson & Cushing; cost, \$12,993; signed, Feb. 18; filed, Feb. 20; payments, \$1,918, 1-5 work done; \$1,918, 2-5 work done; \$1,918, 3-5 done; \$1,918, 4-5 done; \$1,918, completed; \$2,538, 35 days.

Myrtle street, Oakland. Two-story building; owner, Ewing Marcuse; architects, Cary & Johnson; contractors, Marcuse, Lesser & Co.; cost, \$3,500; signed, Feb. 1; filed, Feb. 13; payments, \$875, rustic and roof on; \$875, brown mortar on; \$875, completed; \$875, 35 days.

Near San Leandro Lake, Oakland. Construction of a Hyatt Filter Plant; owners, Contra Costa Water Co.; contractors, Hyatt Water Co.; cost, \$47,500; signed, Nov. 14, 1890; filed, Feb. 6; payments, 1/2 from time to time, according to terms expressed in agreement.

Oakland. One-story cottage; owner, Miss Annie E. Sn; architect, F. Wells; contractors, Concanan & Shay; cost, \$1,000; signed, Feb. 7; filed, Feb. 11; payments, \$275, frame up and roof boards on; \$675, ready for plastering; \$675, plastered; \$675, completed; \$675, 35 days.

Oak Park, Alameda. To build; owner, Chas. H. Champion; architects, Judd, Hamley & Co.; contractor, John Sathurelles; cost, \$1,500; signed, Feb. 20; filed, Feb. 20; payments, \$725, frame up; \$725, ready for plaster; \$725, first coat of paint; \$725, 35 days.

Pacific avenue near Jay, Alameda. Fire-room cottage; owner, A. O. Ross; architect, C. H. Hunter; contractor, J. E. Henderson; cost, \$2,100; signed, Feb. 9; filed, Feb. 9; payments, \$400, frame up; \$400, rustic and frame set; \$400, brown mortar on; \$375, completed; \$375, 35 days.

Regent street, near Central avenue, Alameda. To build; owner, M. S. Taylor; architects, A. W. Pattiani & Co.; contractors, A. W. Pattiani & Co.; cost, \$2,834; signed, Feb. 19; filed, Feb. 24; payments, \$800, rustic, roof shingles on and chimney built; \$700, brown mortar on; \$625, completed; \$700, 35 days.

Rowland Tract, Oakland. Two-story house; owner, Geo. K. Porterfield; contractor, Chas. W. Bolles; cost, \$3,200; signed, Jan. 30; payments, 1-5, building enclosed; 1/4, brown mortar on; 1/4, inside ready for painter; balance, 35 days.

San Antonio. To build; owners, Jas. H. and Eliza Shephard; architect, J. A. Eastman; contractor, J. A. Eastman; cost, \$2,275; signed, Feb. 10; filed, Feb. 11; payments, \$568, frame up; \$568, brown mortar on; \$568, completed; \$571, 35 days.

Sherman near King's avenue, Alameda. Two-story frame; owners, Mrs. E. and Wm. Bowers; architects, A. W. Pattiani & Co.; contractors, A. W. Pattiani & Co.; cost, \$3,710; signed, Feb. 5; filed, Feb. 9; payments, \$1,000, rustic and roof shingles on, and chimney built; \$550, window frames set and brown mortar on; \$810, completed; \$800, 35 days.

Simpson avenue near Telegraph avenue, Oakland. Two-story dwelling; owner, Miss A. M. Hamby; architects, J. C. & E. A. Mathews; contractors, Concanan & Shay; cost, \$3,465; signed, March 4; filed, March 5; payments, \$400, frame up and chimney built; \$1,000, brown mortar on; \$1,195, 75, completed; \$866, 25, 35 days.

Sixth near Franklin, Oakland. Two-story frame cottages; owner, J. Pantakey; architect, J. C. S. Whalen; contractor, J. C. S. Whalen; cost, \$3,250; signed, Feb. 5; filed, Feb. 5; payments, \$800, frame up and roof on; \$2,450, completed.

Thirteenth avenue near Nineteenth street, Oakland. Two-story frame; owner, Mrs. C. H. Elliott; contractors, Marshall & Linton; cost, \$1,925; signed, Jan. 31; filed, Feb. 20; payments, \$481.25, frame up; \$481.25, brown mortar on; \$481.25, completed; \$481.25, 35 days.

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ASSYRIAN libraries have been discovered in the remains of the ancient city of Ninevah. The books are composed of tablets of clay, on which the characters were finely drawn when the clay was plastic. The pages are numbered, as are the books of today. After the tablets are baked they afford an almost imperishable means of communicating knowledge to futurity.

Why not prepare the master-pieces of the literature of to-day in such a manner for deposition in the corner-stones of our public libraries that are yet to be?

THE SENSE OF BEAUTY.

BY CHANNING.

Beauty is an all-pervading presence. It unfolds in the numberless flowers of the spring. It waves in the branches of the trees and the green blades of grass. It haunts the depths of the earth and sea, and gleams out in the hues of the shell and the precious stone. And not only these minute objects, but the ocean, the mountains, the clouds, the Heavens, the stars, the rising and setting sun, all overflow with beauty. The universe is its temple; and those men who are alive to it, cannot lift their eyes without feeling themselves encompassed with it on every side. Now, this beauty is so precious, the enjoyments it gives are so refined and pure, so congenial with our tenderest and noble feelings, and so akin to worship, that it is painful to think of the multitude of men as living in the midst of it, and living almost as blind to it as if, instead of this fair earth and glorious sky, they were tenants of a dungeon. An infinite joy is lost to the world by the want of culture of this spiritual endowment. Suppose that I were to visit a cottage, and to see its walls lined with the choicest pictures of Raphael, and every spare nook filled with statues of the most exquisite workmanship, and that I were to learn that neither man, woman, nor child ever cast an eye at these miracles of art, how should I feel their privation; how should I want to open their eyes and to help them to comprehend and feel the loveliness and grandeur which in vain courted their notice! But every husbandman is living in sight of the works of a diviner Artist; and how much would his existence be elevated, could he see the glory which shines forth in their forms, proportions, and moral expression! I have spoken only of the beauty of nature, but how much of this mysterious charm is found in the elegant arts, and especially in literature? The best books have most beauty. The greatest truths are wronged if not linked with beauty, and they win their way most surely and deeply into the soul when arrayed in this their natural and fit attire. Now, no man receives the true culture of a man, in whom the sensibility to the beautiful is not cherished; and I know of no condition in life from which it should be excluded. Of all luxuries this is the cheapest and most important to those conditions, where coarse labor tends to give a grossness to the mind. From the diffusion of the sense of beauty in ancient Greece, and of the taste for music in modern Germany, we learn that the people at large may partake of refined gratifications, which have hitherto been thought to be necessarily restricted to a few.