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Three Homes by Bakewell & Brown

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THE
BUILDING
REVIEW



JANUARY, 1922

25 Cents Vol. XXI No. 1

Published in San Francisco

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BUILDING REVIEW

VOL. XXI. JANUARY, 1922 No. 1

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Pebble Beach, Calif.

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Residence of
MR. W. C. VAN ANTWERP
Burlingame, California

BAKEWELL & BROWN
Architects

A. QUANDT & SONS
Decorators

Modern Architecture

MODERN Architecture is often an anomaly in that it frequently represents the "latest" whim of the profession. What pleasure it is to see modern homes built that will bear the evidence of correct architectural treatment, a century hence, as well as today.

This home of the Tudor Period represents a problem from the interior decorator's viewpoint. Not only must it create the appearance of the Time-mellowed ancestral halls of The Continent, but the paint and varnish products must also possess that desirable property of permanency. Such effects were secured with Fuller's Paints and Varnishes.

Pioneer White Lead was used both for the interior and exterior work. This lead has been found so dependable in its spreading properties, covering capacity, fineness and texture, that Master Painters turn instinctively to it for results.

Silkenwhite Enamel was used exclusively for the woodwork. The splendid levelling properties of this product made it ideal for this purpose. Its gloss, richness and satin-like depth caused its selection by owner, architect and decorator.

Fullerwear Varnish was also used exclusively on interior woodwork and floors. This Varnish will withstand any test to which a high-grade product may be subjected. Its toughness, easy-flowing properties, as well as its durability made it the unanimous choice of owner, architect and decorator.

Fuller's Flat White Undercoat was used as the foundation upon which Silkenwhite Enamel was applied.



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The BUILDING REVIEW

VOL. XXI.

SAN FRANCISCO, JANUARY, 1922

No. 1.



DANVERS HOUSE, BURLINGAME, CALIF.
RESIDENCE OF MRS. W. C. VAN ANTWERP
BAKEWELL & BROWN, Architects

THREE COUNTRY HOUSES BY BAKEWELL & BROWN

By HARRIS ALLEN

TO make the best thing of its kind in the country—that is surely worth the doing. Connoisseurs say that Mrs. William Clarkson Van Antwerp's home in Burlingame, "Danvers House," is the finest Tudor house in America. Not only this, many people call it the most beautiful house in Burlingame, and that of itself is no mean distinction.

These descriptions naturally include the contents as well as the frame. But to provide a house and an adequate setting for this remarkable collection of antiques, with no jarring note, is certainly an achievement.

Bakewell and Brown are noted for the careful study they give their designs, their consistent and correct interpretation of the

architectural alphabet. Of this the Van Antwerp house is a peculiarly successful example. The Tudor style is one of considerable latitude. It is a sort of clearing-house of the periods; it offered a cosmopolitan hospitality to Gothic and Renaissance, to continental influences as well as to indigenous sources of inspiration.

But this broadness of the field, while it gives much freedom to a designer, also complicates his problems. Of course it would be easy to pick a detail here and motif there, throw them together into a conglomerate jumble and call it a Tudor house, "pointing with pride" to many precedents old England contains which display a fascinating and picturesque mixture of styles.

To create a coherent design, however, whose varying elements, suggestive of different sources, are yet so welded together that the whole composition produces the effect of harmony, of unity—this comes not far short of being an architectural triumph, as it is assuredly an artistic joy.

Arguments as to the congruity of English architecture in California fortunately do not enter into this case at all. Nothing could be happier than this setting of fine oaks and gentle contours. Although the approaches and gardens are unfinished, indeed hardly more than indicated as yet, the house "belongs" to the site; it fits into its surroundings whether viewed from a distance or close at hand. That the landscaping will be carried out with the same loving care and thoroughness as the house and its equipment, is a foregone conclusion. And it will be a very pleasant occupation.

The exterior treatment is vigorous and coherent. The mass and sky-line are picturesque but not confused; the composition ties well together. Rough stucco walls of a slightly varying warm ivory tone form a substantial foundation; the plaster in the panels above is of a generally deeper shade. The second story line forms a strong horizontal belt around the house, continued by the eaves of the wings.

All exterior woodwork is oak, adzed by

hand, studded with heavy wooden pegs and stained to a pleasant weathered brown.

These sturdy walls uphold a splendid mass of roof. It would be hard to find a more interesting one, except for the picturesque touches that age brings. Thick slabs of slate, of varying sizes, of varying colors ranging through reds, grays, greens, blues; slightly waving outline of hip and ridge; irregular grading of courses, roughly curving slate valleys—such a roof makes one believe that the days of joy in craftsmanship are not past. It may be noted in passing, that there are one hundred and twenty six tons of slate here, requiring walls strong in fact as well as in appearance.

Advantage has been taken of the slope of the site to emphasize this sturdiness on the lower, the entrance facade. This bold flight of steps from driveway to door is doubly successful; besides accenting the massiveness of foundation, it serves to shield the living quarters on the public side. This approach does not seem quite English; but thanks to the freedom of style, there appears nothing forced or inconsistent about it. In fact, one is inclined to hope that no large growth of vines will be allowed to soften the sheer vigor of the composition.

The illustrations show details clearly enough to make further descriptions unnecessary. Mention, however, may be made of the interesting treatment of the brick chimneys, to which is due much of the charm of the general silhouette.

The main rooms inside cannot be dealt with apart from their furnishing. As a matter of fact, the building was planned especially to house a very fine collection of antiques, and for bachelor's quarters. But such good judgment has been used in finish and equipment, that far from having a cheerless, museum atmosphere, the house is distinctly livable, with the air of a genuine home. A home, of course, such as many people dream of, but few attain.

A simple, low-ceiled entrance hall leads through a pointed stone arch into a screened gallery across the end of the Great Hall. Opposite the arch a narrow winding stair runs to the organ loft above. This screen, with its carved panels and figures, is extremely effective in contrast with the big simplicity of line and surface that prevails, relieved also by bay window and chimney-piece and the superb Barberini tapestry, which has only changed hands twice in seven hundred years, occupying the long inner wall. The carved grotesques, musicians, choristers, jester, are



THE ITALIAN DOOR FROM LIVING ROOM TO LIBRARY

conceived and executed with a deliciously broad and vigorous touch.

Most of the woodwork of the Great Hall was salvaged from an old English wreck, the "Duchess of Kent," and has an exquisite pink-silver-gray patina given by time and the salt sea sands. This has been duplicated remarkably well where necessary, in carving or trim; and the rough plaster blends in with a tone neither gray nor brown, an ideal background for the rich mellow colors of furniture and hangings. Through the stained glass panels of the great window, gathered from England, France, Belgium, Italy, pour streams of gold and ruby and sapphire. No gloomy antiquarian shrine this, but an apartment of exceeding charm, spacious enough for full appreciation of the treasures it contains.

Arresting the eye, and serving to accent the height and spaciousness of the Great Hall, there hangs near the window a model of the "Royal Harry", the ship which carried Henry the Eighth to the Field of the Cloth of Gold. The value of this one pendant ornament, informally placed, is extraordinary; more of the kind would be confusing, the lack of it might make the Great Hall too formal.

The fireplace is usually the central motif of a room. That is hardly true in this case, for although each wall affords artistic delight—the screened gallery, the bay window, the chimney, the tapestry—still the compelling feature is unquestionably the window. The beauty and dignity of the Sixteenth Century marble mantel must not be under-estimated, however. It once stood on exhibit at the Metropolitan Museum, with other objets d'art loaned by a celebrated private collector. The only change one could wish in the Great Hall, would be to omit the overmantel, thus emphasizing the proportions and importance of this delightful piece of carving.

The dining room, a room ceiled with wood, was brought intact from Spain except for the hooded stone fireplace, and set up in place with a few necessary adjustments. A very pleasing grayish-brown finish blends well with the coloring of the Great Hall and gallery, of which fascinating glimpses appear through stone arched openings. The treatment of the library is somewhat similar; it is a charming room, whose surrounding book-cases are filled with historic treasures of incunabula and illuminated manuscripts. What of wall surface is exposed, is in this case a rough plaster, as in the Great Hall. Further tending to the simplicity desirable



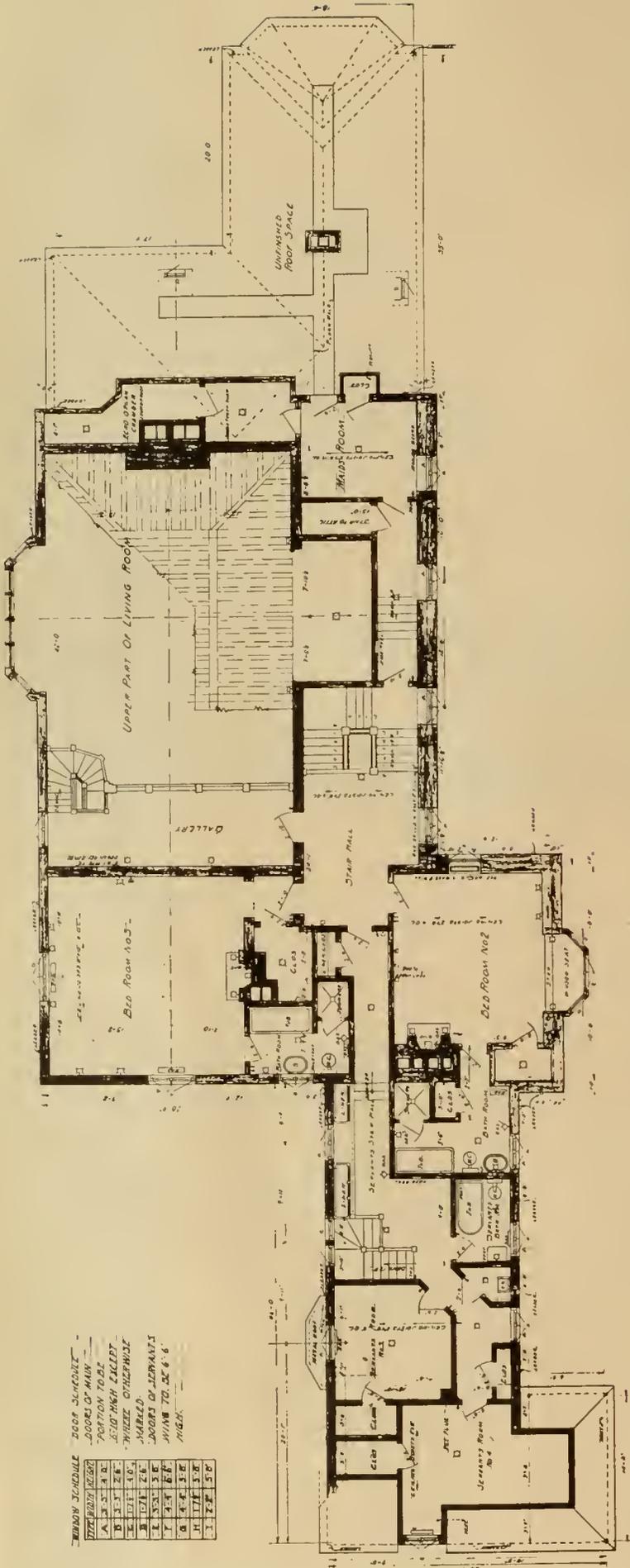
"THE ARCHES OF THE LOGGIA FRAME A SERIES OF UNFORGETTABLE PICTURES"

in such a room, ceiling beams are plain and mantel piece broad and flat; whereas in the dining room, the ceiling is stenciled with richly colored patterns, subdued to time's inimitable softness and warmth. Here is a fine setting for the rare collection of old English silver tankards and candelabra which the owner has gathered.

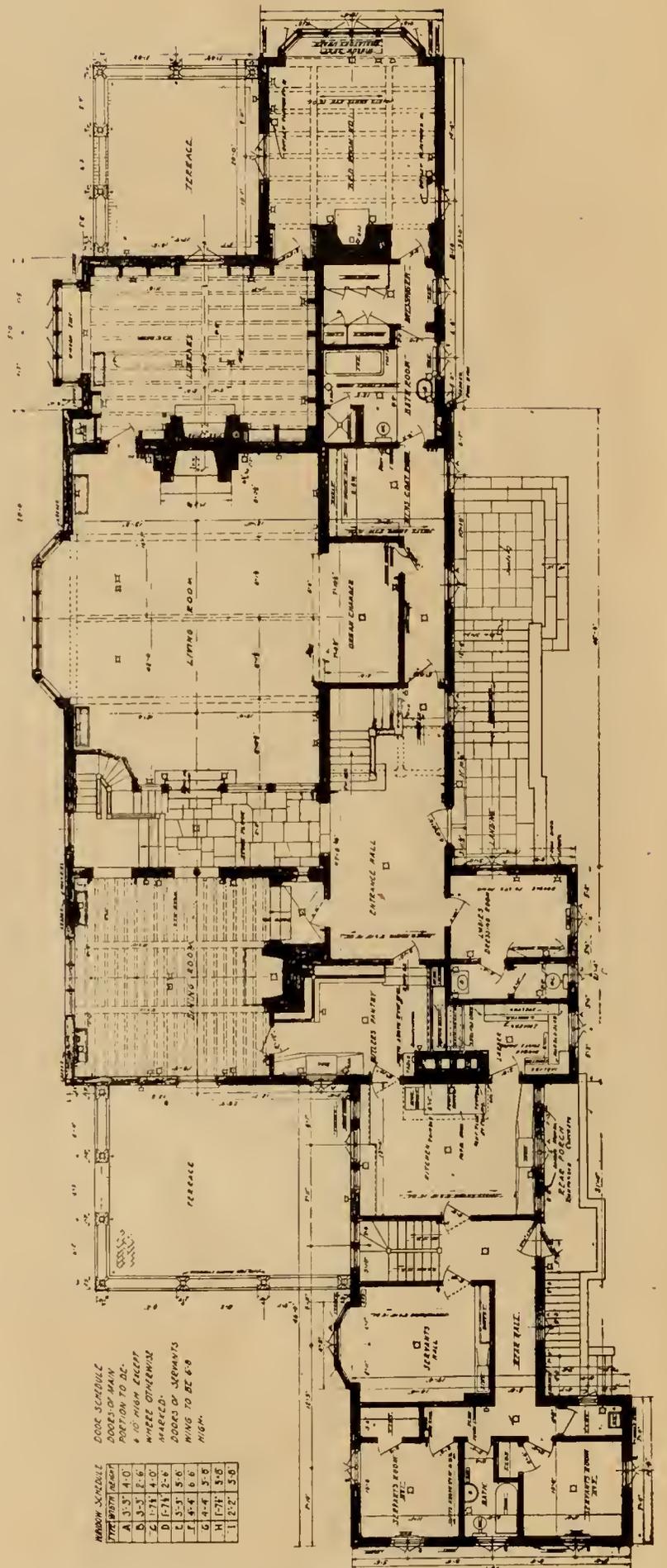
The finish in these main rooms was put together, with incidental details, by P. W. French and Company of New York, who have shown remarkably good judgment and discrimination in co-operating with owner and architect to such an effect. Here there can be no uncertainty as to changing styles; this home will grow ever more satisfying as years go by.

With the residence of Mr. Clark, at Pebble Beach, totally different requirements were given the architect. In its initial stages it very likely was hardly more than a pavilion by the sea, a shelter to while away a few hours on occasion. One can sense its growth, spreading out and down—and around; for the court has become quite largely the center of living, and serves also as communication to the various other apartments.

The relation of this dainty and refined Italian villa, formal even in its irregularity,



SECOND FLOOR PLAN



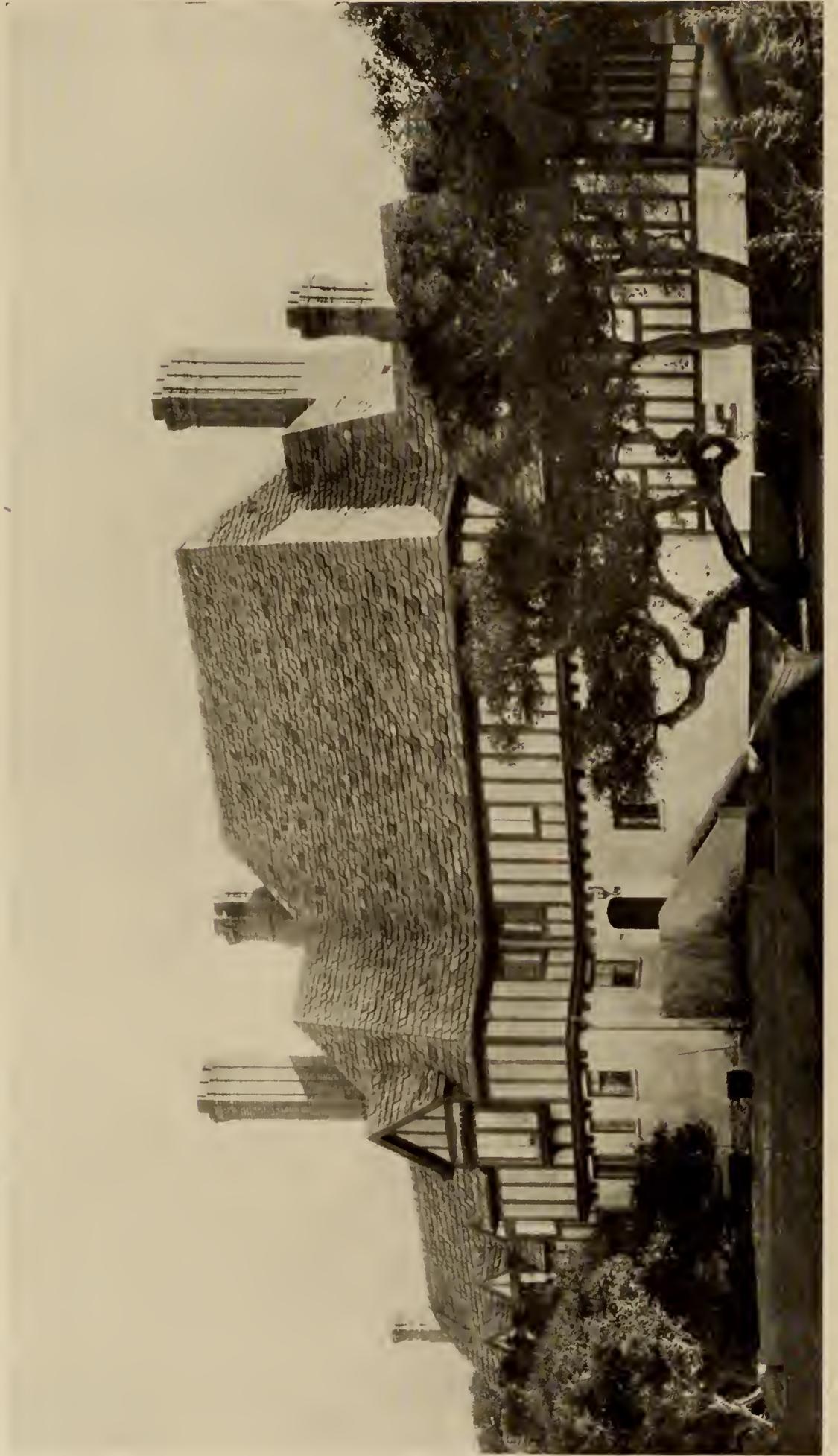
FIRST FLOOR PLAN

DANVERS HOUSE, BURLINGAME, CALIF.
RESIDENCE OF MRS. W. C. VAN ANTWERP
BAKEWELL & BROWN, Architects
Photographed by F. M. Fraley



"The Finest Tudor House in America"

RESIDENCE OF MRS. W. C. VAN ANTWERP
DANVERS HOUSE, BURLINGAME, CALIF.
BAKEWELL & BROWN, ARCHITECTS
Photograph by F. M. Fraley



“The mass and sky-line are picturesque, but not confused.”

DANVERS HOUSE, BURLINGAME, CALIF.
RESIDENCE OF MRS. W. C. VAN ANTWERP
BAKEWELL & BROWN, ARCHITECTS
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“Nothing could be happier than this setting of fine oaks and gentle contours.”

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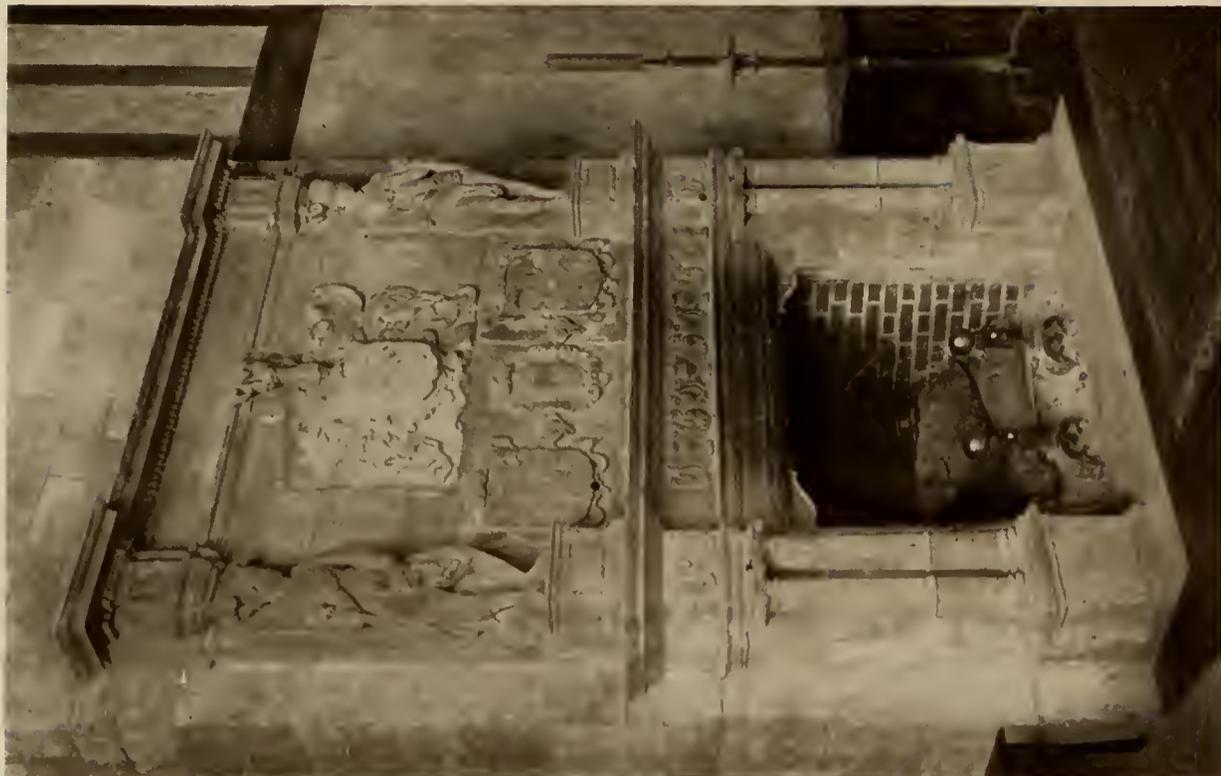
"Through the stained glass panels of the great window pour streams of gold and ruby and sapphire."

DANVERS HOUSE, BURLINGAME, CALIF.
RESIDENCE OF MRS. W. C. VAN ANTWERP
BAKEWELL & BROWN, ARCHITECTS
Photograph by F. M. Fraley



"The height and spaciousness of the Great Hall."

DANVERS HOUSE, BURLINGAME, CALIF.
RESIDENCE OF MRS. W. C. VAN ANTWERP
BAKEWELL & BROWN, ARCHITECTS
Photograph by F. M. Fraley



"The beauty and dignity of the Sixteenth Century Marble Mantel."

DANVERS HOUSE, BURLINGAME, CALIF.
RESIDENCE OF MRS. W. C. VAN ANTWERP
BAKEWELL & BROWN, ARCHITECTS
Photograph by F. M. Fraley



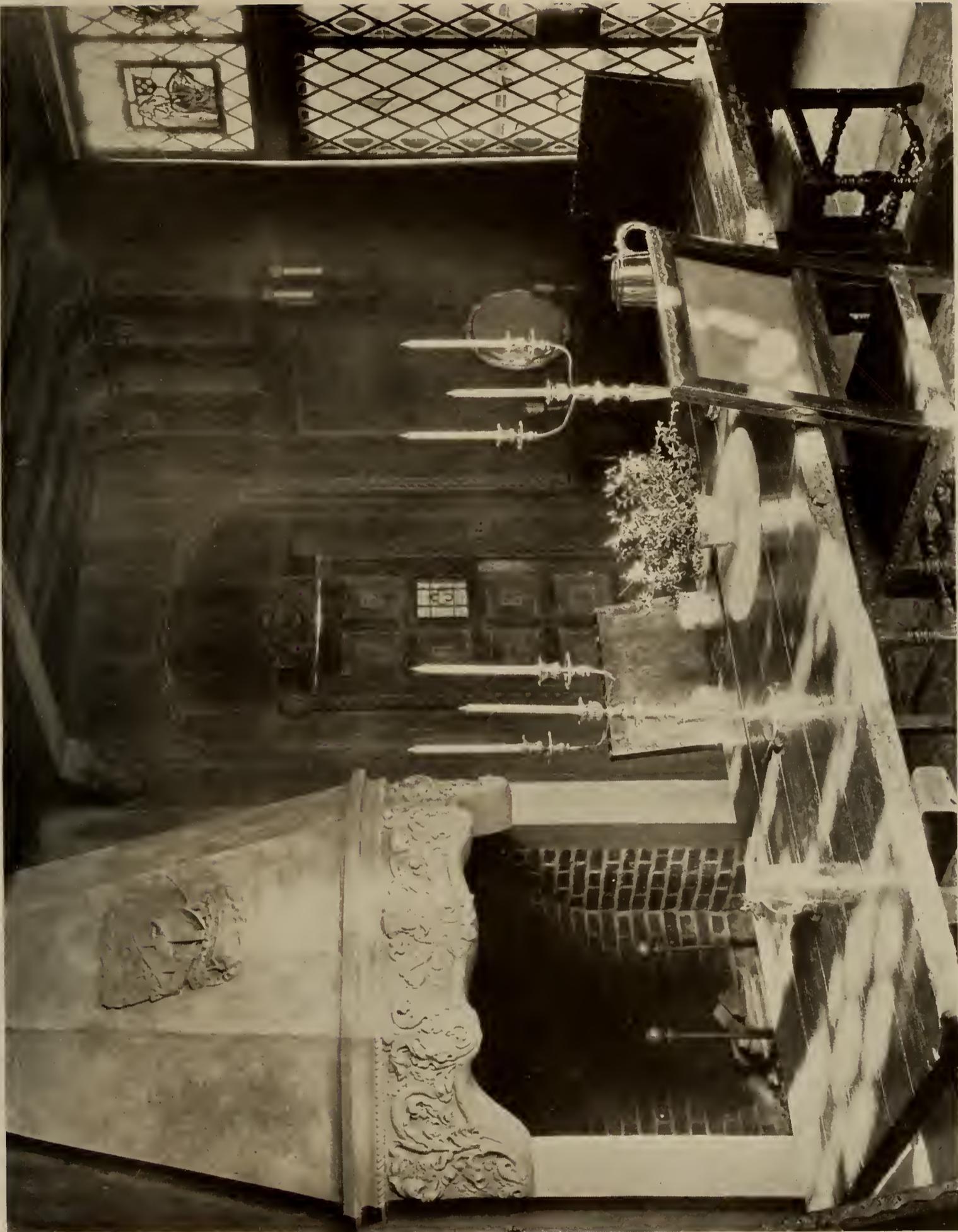
"The carved grotesques, musicians, choristers, jester, are conceived and executed with a deliciously broad and vigorous touch."

DANVERS HOUSE, BURLINGAME, CALIF.
RESIDENCE OF MRS. W. C. VAN ANTWERP
BAKEWELL & BROWN, ARCHITECTS
Photograph by F. M. Fraley



"These sturdy walls uphold a splendid mass of roof."

DANVERS HOUSE, BURLINGAME, CALIF.
RESIDENCE OF MRS. W. C. VAN ANTWERP
BAKEWELL & BROWN, ARCHITECTS
Photograph by F. M. Fraley



“The dining room was brought intact from Spain.”

DANVERS HOUSE, BURLINGAME, CALIF.
RESIDENCE OF MRS. W. C. VAN ANTWERP
BAKEWELL & BROWN, ARCHITECTS
Photograph by F. M. Fraley



“Bookcases filled with historic treasures of incunabula and illuminated manuscripts.”

DANVERS HOUSE, BURLINGAME, CALIF.
RESIDENCE OF MRS. W. C. VAN ANTWERP
BAKEWELL & BROWN, ARCHITECTS
Photograph by F. M. Fraley



"Creamy stucco and red tiles against the green of pines and cypress."

RESIDENCE OF MR. CHAS. W. CLARK
PEBBLE BEACH, CALIF.
BAKEWELL & BROWN, ARCHITECTS
Photograph by F. M. Fraley



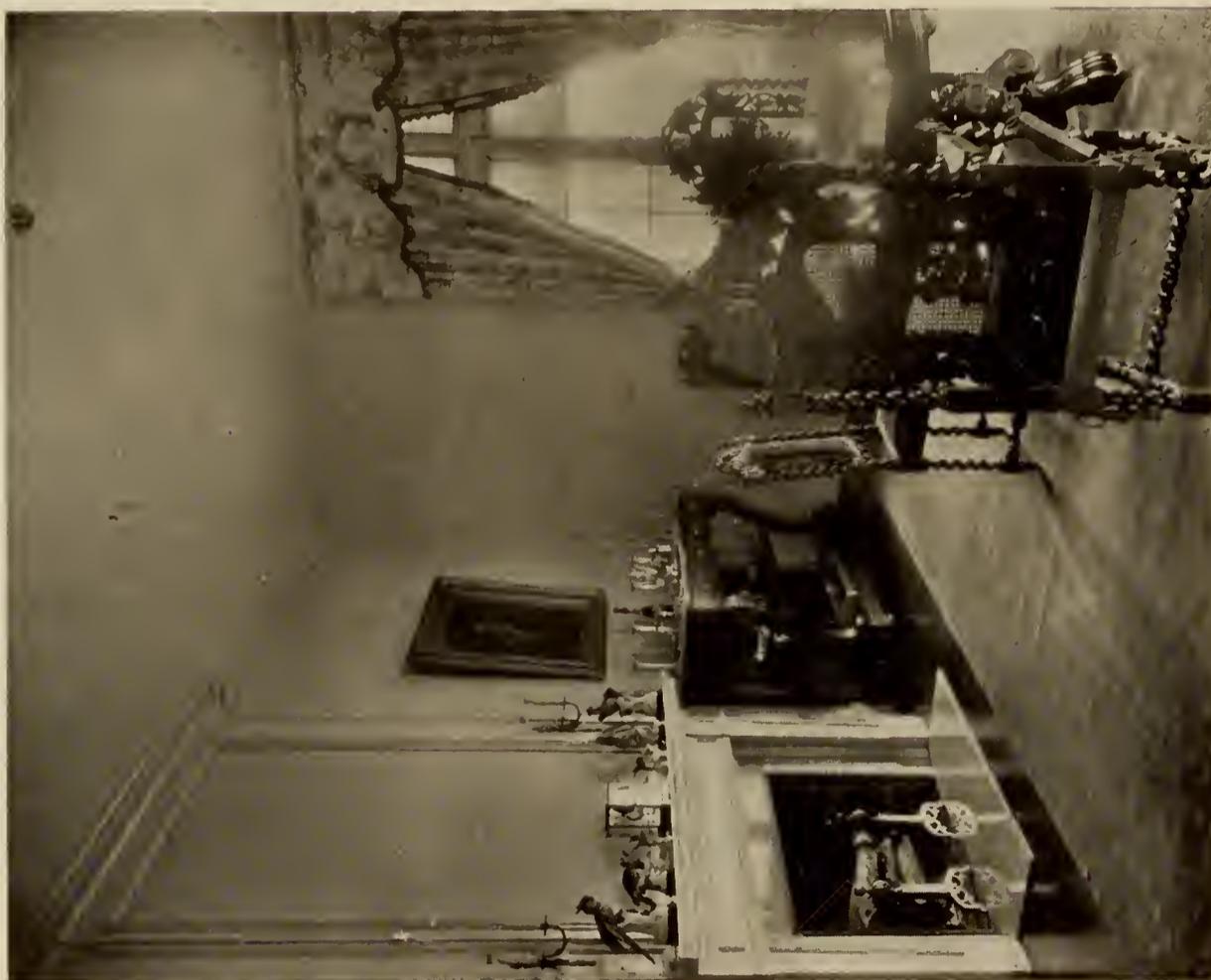
"Red roofs against the deep blue sea."

RESIDENCE OF MR. CHAS. W. CLARK
PEBBLE BEACH, CALIF.
BAKEWELL & BROWN, ARCHITECTS
Photograph by F. M. Fraley



"The spirit of those Mediterranean shores."

RESIDENCE OF MR. CHAS. W. CLARK
PEBBLE BEACH, CALIF.
BAKEWELL & BROWN, ARCHITECTS
Photograph by F. M. Fraley



...The interior treatment refined, restrained, with the pleasing qualities of good proportion and good taste."

RESIDENCE OF MR. GERALD RATHBONE
BURLINGAME, CALIF.
BAKEWELL & BROWN, ARCHITECTS
Photograph by F. M. Fraley



"It has dignity, without being austere."

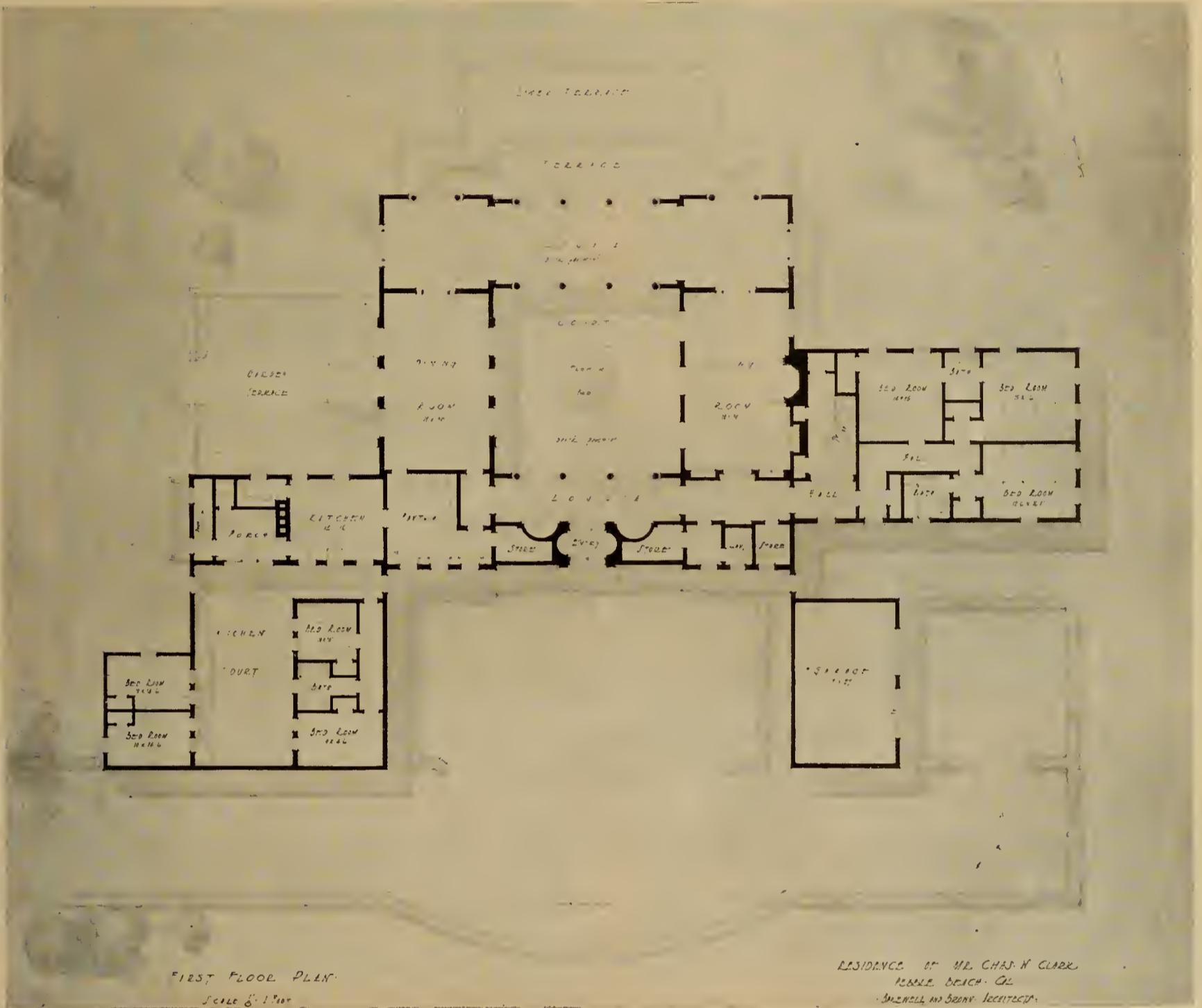


RESIDENCE OF MR. GERALD RATHBONE
BURLINGAME, CALIF.
BAKEWELL & BROWN, ARCHITECTS
Photograph by F. M. Fraley



"It is French to its finger-tips."

RESIDENCE OF MR. GERALD RATHBONE
BURLINGAME, CALIF.
BAKEWELL & BROWN, ARCHITECTS
Photograph by F. M. Fraley

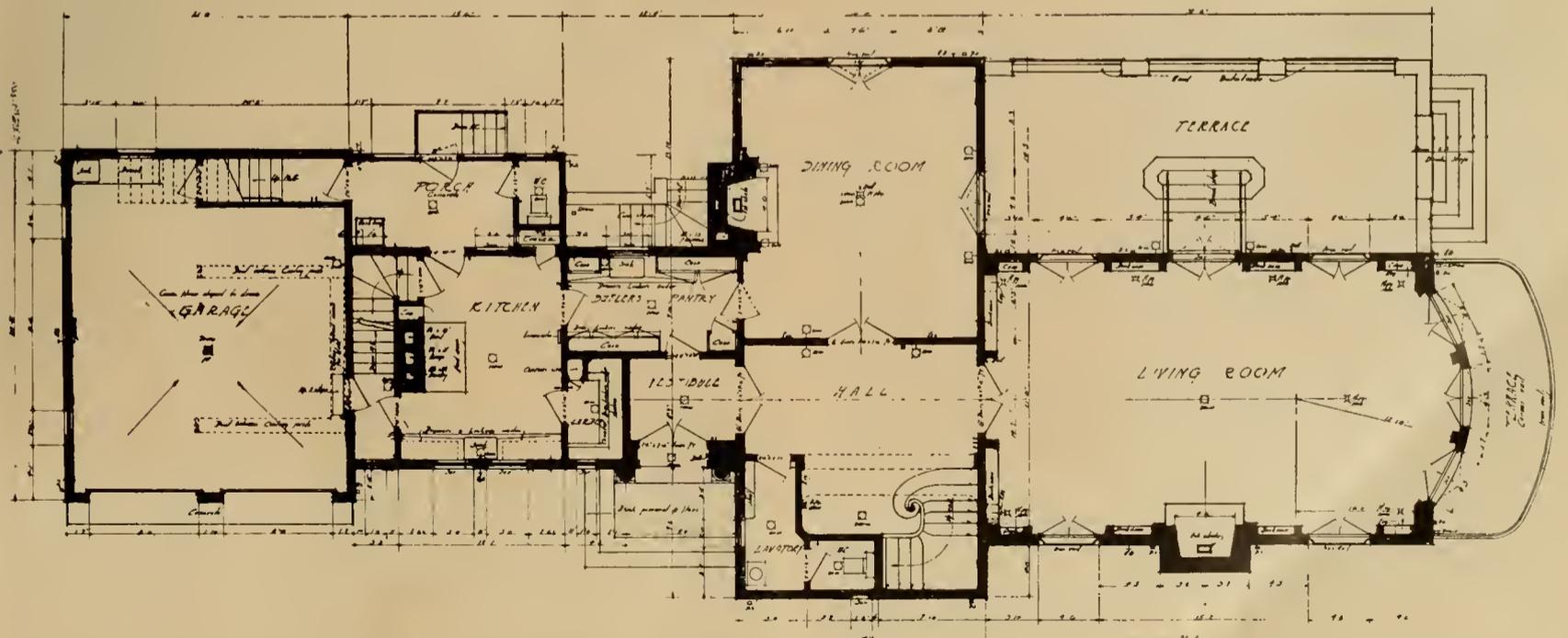


FIRST FLOOR PLAN
SCALE 1/8" = 1'-0"

RESIDENCE OF MR. CHAS. W. CLARK,
PEBBLE BEACH, CALIF.
BAKEWELL AND BROWN, ARCHITECTS.

FLOOR PLAN
RESIDENCE OF MR. CHAS. W. CLARK, PEBBLE BEACH, CALIF.
Photograph by F. M. Fraley

BAKEWELL & BROWN, Architects



FLOOR PLAN

RESIDENCE OF MR. G. RATHBONE, BURLINGAME, CALIF.
Photograph by F. M. Fraley

BAKEWELL & BROWN, Architects



"TWISTED GRAY TRUNKS OF CYPRESS AND THE BLUE EXPANSE OF WATER"

to the wild and rugged sea scape, may seem forced, inconsistent; but one has only to recall the terraces of Amalfi, Sorrento, Capri, to realize how deftly the spirit of those Mediterranean shores has been caught here. It is a bit new yet, that is all.

It is really the color that tells the tale. Between the intense blue of sea and sky, come gray-green rocks, a brown carpet of pine-needles, then the creamy stucco and its roof of warm red and brown tiles against the strong dark green of pines and cypress. The glint of white sash and blue-green grille work picks out high lights in the picture.

From land, the palette is less varied, more intense; white walls, red roofs against the deep blue sea. In the court, the arches of the loggia frame a series of unforgettable pictures, twisted gray trunks of cypress and the blue expanse of water.

No attempt at landscape gardening has been made, except in the courts; the rough stucco will be softened only by the stains of weather and sea spray, its rocky bed by the soft brown patches of pine needles.

So this little week-end shelter has developed into a very lovely sea-side villa, equipped for frequent use by owners and guests. Close at hand as it is, it might well be on the other side of the world.

Mr. Rathbone's house in Burlingame is more the sort of thing we instinctively associate with Bakewell and Brown. It is French to its finger-tips; "chic" refined, expressive. It has the society manner; it almost shrugs its shoulders, so to speak, at the plebeian passer-by.

And then it has something of the same nameless charm as the reticent demoiselle of the aristocracy. It so obviously hides more than it reveals; even the garden front is not to be called expansive; it has a dignity, without being austere. However, on occasion, one can picture the rose garden a mass of bloom on a warm sunny day, and the French windows thrown wide open to the perfumed air—a pleasant conquest of milady's reserve.

It is perhaps unfair to reproduce the house just now, for the roof has not had time to fade from its too dark stain to the anticipated soft gray.

The interior treatment is quite in keeping, refined, restrained, with the pleasing qualities of good proportion and good taste. It is, indeed, a model of delicate and consistent French architecture in a house of moderate size and cost, with the typical French clarity and logic of plan, which must make a very livable, satisfying home.

THE BUILDING REVIEW

UNITED STATES CIVIL SERVICE EXAMINATION

APPLICATIONS WILL BE RATED AS RECEIVED UNTIL FURTHER NOTICE

SENIOR ENGINEER, GRADE 2, \$2,100-\$2,700

Civil, Electrical, Mechanical, Signal, Structural, Telegraph and Telephone Senior Architect

The United States Civil Service Commission announces open competitive examinations for the positions listed above. Vacancies in the Interstate Commerce Commission, under the act providing for the valuation of the property of common carriers, at \$2,100 to \$2,700 a year, and vacancies in positions requiring similar qualifications, at these or higher or lower entrance salaries, will be filled from these examinations, unless it is found in the interest of the service to fill any vacancy by reinstatement, transfer, or promotion.

The entrance salary within the range stated will depend upon the qualifications of the appointee as shown in the examination and the duty to which assigned.

BONUS.—Appointees at annual compensation of \$2,500 or less, whose services are satisfactory, may be allowed the increase granted by Congress of \$20 a month.

ASSIGNMENT.—Appointments to these positions will be principally for duty in Washington, D. C.

TRAVELING EXPENSES.—Appointees will be allowed necessary expenses when absent from headquarters in the discharge of official duties.

CITIZENSHIP AND SEX.—All citizens of the United States who meet the requirements, both men and women, may enter this examination; appointing officers, however, have the legal right to specify the sex desired in requesting certification of eligibles.

On account of the needs of the service applications will be received until further notice. Papers will be rated as received and certification made as the needs of the service require.

SUBJECTS AND WEIGHTS.—Competitors will not be required to report for examination at any place, but will be rated on the following subjects, which will have the relative weights indicated:

Subjects.	Weights.
1. General and technical education, and preliminary or apprenticeship training	30
2. Responsible experience and fitness.....	70
Total.....	100

Competitors will be rated upon the sworn statements in their applications and upon corroborative evidence.

REQUIREMENTS FOR ELIGIBILITY.—It must be shown in connection with this application that each applicant is a person of good moral character and temperate habits, active, intelligent, and discreet; of good speech and manner, qualified to address and confer with railway and public officials as occasion may require.

These examinations are held to secure eligibles having a thorough technical training and several years' practical experience in railway location, design, construction, or maintenance work, and having a thorough acquaintance with the methods of inventoring and cost estimating of railway property acquired in the service of carriers or of Federal or State commissions.

Applicants must show (1) that they have had at least four years of preliminary or apprenticeship training or that they have graduated from a technical school or college of recognized standing, and (2) that they have had at least four years of responsible experience, some of which must have been acquired within the two years preceding the date of the examination.

In each case the education of the preliminary apprenticeship training and the responsible experience must have been in the class for which application is made, as given in the title of this announcement.

For telegraph and telephone engineers and general architect responsible experience is acceptable, but for the other positions railway experience is required. For architect, experience in design and construction of railway structures is preferred.

CAUTION.—Great care should be taken to make statements in the application form complete and correct in all details. Applicants should state fully all experience having any bearing on their qualifications for the position, although part of it may be of a character not herein mentioned. Especial weight will be given to experience in valuation and unit-cost work.

AGE.—Applicants must have reached their twenty-fifth but not their fiftieth birthday on the date of making oath to the application. Age limits do not apply to persons entitled to preference because of military or naval service.

PHYSICAL ABILITY.—Applicants must be physically qualified for performing the duties required in this position.

JUNIOR ENGINEER, \$1,320 TO \$1,980 A YEAR

Civil, Electrical, Mechanical, Signal, Structural, Architectural, Telegraph, and Telephone

The United States Civil Service Commission announces open competitive examinations for the positions listed above. Vacancies in the Interstate Commerce Commission in Washington, D. C., for duty in connection with the valuation of the property of common carriers, at entrance salaries indicated, and vacancies in positions requiring similar qualifications, at these or higher or lower salaries, will be filled from these examinations, unless it is found in the interest of the service to fill any vacancy by re-instatement, transfer, or promotion.

RANGE IN SALARY.—The entrance salary within the range stated will depend upon the qualifications of the appointee as shown in the examination and the duty to which assigned.

BONUS.—Appointees whose services are satisfactory may be allowed the increase granted by Congress for the current fiscal year of \$20 a month.

CITIZENSHIP AND SEX.—All citizens of the United States who meet the requirements, both men and women, may enter these examinations; appointing officers, however, have the legal right to specify the sex desired in requesting certification of eligibles.

On account of the needs of the service applications will be received until further notice. Papers will be rated as received and certification made as the needs of the service require.

SUBJECTS AND WEIGHTS.—Competitors will not be required to report for examination at any place, but will be rated on the following subjects, which will have the relative weights indicated:

Subjects.	Weights.
1. Physical ability	10
2. Education, training, and experience.....	90
Total.....	100

BASIS OF RATINGS.—The ratings will be based upon competitors' sworn statements in their application and upon corroborative evidence.

REQUIREMENTS.—Applicants must meet the requirements specified in one of the following groups:

(a) Graduation from a college, university, or technical school of recognized standing in the line of engineering for which application is made, with at least one year's subsequent experience.

(b) Senior student in the course called for under (a) with at least 18 months' subsequent experience.

(c) Junior student in the course called for under (a) with at least two years' subsequent experience.

(d) The completion of two years of the course called for under (a) and two and one-half years' subsequent experience.

(e) The completion of one year of the course called for under (a) with at least three years' subsequent experience.

(f) At least four years' practical experience in engineering.

A part of the required experience must have been had within two years of the date of making oath to the application.

For civil engineer, one year of the experience must have been railroad work.

For electrical engineer, one year of the experience must have been on electric railroad or electric divisions of a steam railroad.

For mechanical engineer, one year of the experience must have been in the manufacture of locomotives, cars, air-brake or shop equipment, or with the mechanical department of a railroad.

For signal engineer, one year of the experience must have been on railroad signal work.

For structural engineer, one year of the experience must have been on structural work with a railroad.

For architectural engineer, one year of the experience must have been with a railroad or in general architectural practice.

Experience acquired by working on railroad valuation for Federal or State Governments will be given same weight as that with railroad companies.

REFERENCES.—The references given in the application form should be of any of the following: A professor or instructor in the college attended by the applicant or a superior of the office, company, or other concern under whom the applicant has served or is serving. In any case, the references must have knowledge of the applicant's qualifications.

AGE.—Applicants must have reached their twenty-first but not their fiftieth birthday on the date of making oath to the application. These age limits do not apply to persons entitled to preference because of military or naval service.

RETIREMENT.—Classified employees who have reached the retirement age and have served fifteen years are entitled to retirement with an annuity. The retirement age for railway mail clerks is 62 years, for mechanics and postoffice clerks and carriers 65 years, and for others 70 years. A deduction of 2½ per cent is made from the monthly salary to provide for this annuity, which will be returned to persons leaving the service before retirement with 4 per cent interest compounded annually.

PHOTOGRAPHS.—Applicants must submit with their applications their unmounted photographs, taken within two years, with their names written thereon. Proofs or group photographs will not be accepted. Photographs will not be returned to applicants.

RESIDENCE AND DOMICILE.—Applicants will be admitted to these examinations regardless of their residence and domicile; but only those who have been actually domiciled in the State or Territory of which they are legal residents for at least one year previous to the date of making oath to the application, and who have the county officer's certificate in the application form executed, may become eligible for permanent appointment to the apportioned service in Washington, D. C.

APPLICATIONS.—Applicants should at once apply for Form 1312, stating the title of the examination desired, to the Civil Service Commission, Washington, D. C.; the Secretary of the United States Civil Service Board, Customhouse, Boston, Mass., New York, N. Y., New Orleans, La., Honolulu, Hawaii; Post Office, Philadelphia, Pa., Atlanta, Ga., Cincinnati, Ohio, Chicago, Ill., St. Paul, Minn., Seattle, Wash., San Francisco, Calif., Denver, Colo.; Old Customhouse, St. Louis, Mo.; Administration Building, Balboa Heights, Canal Zone; or to the Chairman of the Porto Rican Civil Service Commission, San Juan, P. R.

Applications should be properly executed, excluding the medical certificate, and must be filed with the Civil Service Commission, Washington, D. C., without delay.

The exact title of the examination, as given at the head of this announcement, and class of engineering in which the applicant desires to qualify, should be stated in answer to Question 1 of this application form.

PREFERENCE.—Applicants entitled to preference should attach to their applications their original discharge, or a certified copy thereof, or their official record of service, which will be returned after inspection.

Issued December 30, 1921.

EDITORIAL

THE BELLY AND THE MEMBERS

In former days, when all a man's limbs did not work together as amicably as they do now, but each had a will and a way of its own, the Members generally began to find fault with the Belly for spending an idle luxurious life, while they were wholly occupied in labouring for its support, and ministering to its wants and pleasures; so they entered into a conspiracy to cut off its supplies for the future. The Hands were no longer to carry food to the mouth, nor the Mouth to receive the food, nor the Teeth to chew it. They had not long persisted in this course of starving the Belly into subjection, ere they all began, one by one, to fail and flag, and the whole body to pine away. Then the Members were convinced that the Belly also, cumbersome and useless as it seemed, had an important function of its own; that they could no more do without it than it could do without them; and that if they would have the constitution of the body in a healthy state, they must work together, each in his proper sphere, for the common good of all. (*Aesop's Fables, No. 197.*)

Careful reading and digestion of this Fable are seriously recommended to all persons connected with or interested in the building industry.

Referendum No. 38 of the U. S. Chamber of Commerce on Legislation For Veterans of the World War has been circulated to all members, asking for votes on the questions included.

Article II calls for a vote in favor of or against legislation and appropriations "to enable ex-service men to build homes." Arguments concerning this proposition fail to mention the fact that every cent devoted to home ownership will be taxable for the future in every municipality in which such homes are built, and that they will be an effective means of relieving high rents now exacted from all citizens through shortage; that they would insure a larger amount of employment than any other proposition presented; and that they are the most permanent benefit that can accrue to the balance of citizens (other than veterans) who are in this way paying part of their debt to the veterans.

Without a question, the building interests will be greatly in favor of this part of the bonus legislation, for we realize more pointedly than people in other lines, what little encouragement the construction industry has had. Each member of our industry might therefore most properly take it upon himself to advance a movement in his community to center the attention of the business men of the country on the advantages to the whole nation of liberal arrangements for enabling the veterans to obtain homes.

OFFICIAL NEWS OF PACIFIC COAST CHAPTERS, A. I. A.

WASHINGTON STATE CHAPTER
DECEMBER MEETING

A short statement of the work of the Educational Committee was made by D. J. Myers.

The proposed amendment to the By-Laws, as suggested by the Secretary of the Institute, was discussed, indicating favorable action.

The arrangements and date of the annual meeting were discussed by D. R. Huntington, chairman of the committee in charge of that event.

A discussion of the Farm House Competition and the work of the Small House Committee was led by C. R. Merriam. The Secretary was instructed to ascertain the progress being made by the Minnesota Bureau in the sale of plans.

The Nominating Committee gave as its report the following nominations, the printing of which herein shall be considered as the official notice:

For President, Carl F. Gould; First Vice-President, Louis Baeder; Second Vice-President, Frederick Westcott; Third Vice-President, Roland Borhek; Secretary, H. O. Sexsmith; Treasurer, Carl Siebrand; Executive Committee, C. H. Alden. Delegates to the Institute Convention, Harlan Thomas, F. A. Naramore, J. H. Schack.

Following the business session a very interesting discussion was indulged in centering around the styles, led by Messrs. Willatzen, Gould and Cote.

SAN FRANCISCO CHAPTER
Meeting December 15, 1921

The regular meeting of the San Francisco Chapter of the American Institute of Architects was held on Thursday evening, December 15, 1921, in the Architectural Club Rooms, 77 O'Farrell Street. The meeting was called to order by the President, Geo. A. Applegarth.

The following members were present:

Harris Allen, A. G. Headman, John Norberg, Morris Bruce, J. S. Fairweather, Chester Miller, B. S. Hayne, W. J. Wilkinson, E. E. Coxhead, G. A. Applegarth, C. Schnaittacher.

Minutes

The minutes of meeting held November 17, were read and approved

New Business

A letter received from the Butte Electric Equipment Company asking for information for the Electrical Contractor's in reference to making an allowance for a deduction.

A letter from Stockton Association received and placed on file.

A letter from the New York Building Congress received and turned over to Publicity Committee.

Adjournment

There being no further business the meeting adjourned.
J. S. Fairweather.

INDUSTRIAL

CALIFORNIA GRANITE, THE ROCK EVERLASTING

HOW MODERN CONTRIVANCES HAVE MADE THE
HARDEST OF ROCKS AVAILABLE FOR
BUILDING PURPOSES

In spite of the tremendous expense formerly attached to the quarrying and transportation of granite its use as a building material in this country dates back to 1749 when King's Chapel was built at the corner of School and Tremont streets, Boston. This was the largest stone structure in the United States at that time and was one of the wonders of that day.

The granite of which this building was constructed was obtained entirely from boulders which were first heated with fire and then broken up by impact with heavy iron balls. The pieces were roughly squared and hewn in their present form.

The life of most building material would be seriously impaired at the outset by such heroic preparation—particularly the fire part of it. King's Chapel however, after weathering 175 years of rugged New England climate shows practically no deterioration.

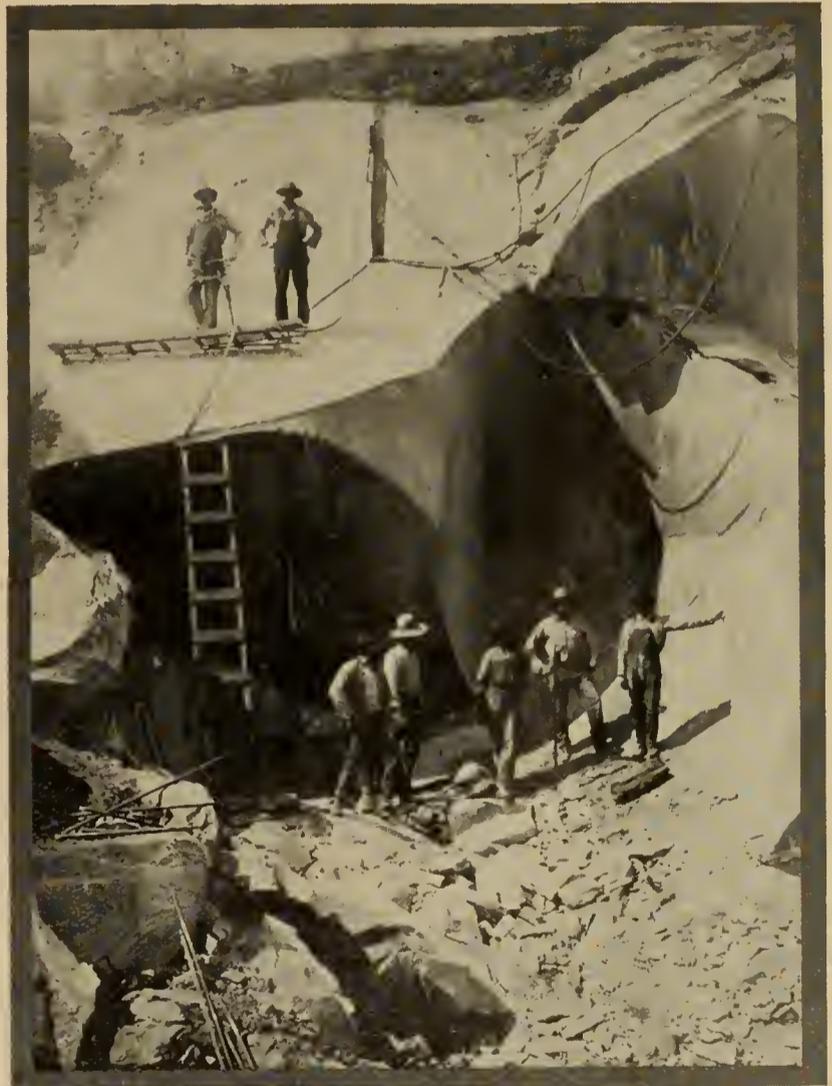
California possesses unlimited deposits of granite which for fineness of texture, beauty of color and durability has no superior. That the granites of other states are better known to architects and builders is the fault of the California granite men, not of the California granite.

There is granite in many counties of the state. The prize sample of this "rock everlasting" is El Capitan which rises in a solid shaft 3300 feet high from the floor of the Yosemite Valley.

Foremost among the granite producing counties are Madera, Fresno, Placer and San Diego. There are large deposits in Mariposa County but they are not yet available for commercial uses because of lack of transportation facilities.

In the past, with untrained men, the crudest of methods used in quarrying, cutting

and finishing and the lack of transportation, the cost of granite for construction purposes was almost prohibitive. Even in spite of the great initial cost, however, there were owners who insisted upon granite because the factor of deterioration was so negligible that a gran-



HERE'S HOW THE "ROCK EVERLASTING" LOOKS IN
ITS CRADLE

ite building was stable as a government bond as security for a loan.

In handling granite today the owners of the deposits have established towns at the usually isolated sites of the deposits and have provided contrivances which make its preparation and transportation simple as baking bread.

The pneumatic drill bites its way into the granite wall and the huge slabs are rent asunder without suffering the deteriorating effect of great heat. Giant hoists, operating by hydro-electric power, lift the slabs into the cutting sheds where modern equipment for handling and electrically driven tools in the hands of experts trained in the carving and polishing of stone, turn out the finished product. The finished blocks, cut at the quarry according to the architect's specifications, are lifted directly from the cutting sheds to the waiting cars and the magic of modern transportation conveys them quickly and cheaply to the site of the building for which they are designed.

The varieties of tone and color in which California granite is very rich give the architect a wide range of artistic possibility. Granite may be carved with as much fineness of detail as marble and with the added advantage that the fineness of the artist's skill will remain in all its clearness of detail through the ages, unaffected by time or the ravages of the elements.

Marble, steel and cement have their place as building materials without which the modern world would have difficulty in getting along. But when we wish to erect a permanent monument whether in the form of chisled shaft, classic temple or towering skyscraper we burrow deep into the earth for the most enduring material—the rock everlasting—granite.

The Campanile at the University of California is one of the fine examples here of California granite as a practical building stone. Among the well-known commercial buildings in San Francisco constructed all or in part of California granite may be cited the Post Office, Public Library, Exposition Auditorium, City Hall, State Building, Bank of California, Federal Reserve Bank, Commercial Union Bank, the Anglo-California Trust Company and many others. These are all monuments to the variety, practicability and durability of California granite—the rock everlasting.



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A PRACTICAL HOME PURCHASE PLAN

By ARTHUR T. RIGGS

For the purpose of helping people of moderate means to own their own homes and to relieve the housing conditions with which the country is confronted, The Equitable Life Assurance Society has extended its Home Purchase plan to one hundred and sixty cities throughout the United States. The plan provides for ten year six per cent mortgages on completed home properties payable by means of easy monthly instalments. These mortgages range in amount from \$1,000 to \$7,500.

A glance at the item "Rent" in the domestic budget of the average "apartment house family" in the metropolitan district of San Francisco—or any other metropolitan district in the United States for that matter—should be sufficient to assure architect and builder that the designing and construction of homes is going to be an important part of their activity in the immediate future and for a long time to come.

The Equitable Life Assurance Society has perfected recently a "home purchase plan" which offers such practical and definite help in meeting and solving the problem of financing home ownership that the Building Review asked Mr. Arthur T. Riggs, who has charge of the Equitable's "Home Purchase" department to prepare an article explaining the plan. The article is published herewith.

Life insurance to the amount of the loan is included to protect the dependents against the burden of the debt, and to protect the Equitable as mortgagee. Over twenty-one million dollars is being loaned to home owners on this plan this year. Since the plan was inaugurated, over ten thousand home owners have been thus assisted and more than thirty-two million dollars has been so loaned.

It is not necessary for the Equitable to invest in the comparatively small units required for dwelling loans, with the care and machinery that that involves, but it chooses to do so in pursuance of its established policy of

investing its funds in the most serviceable manner in the communities from which they come. The encouragement of home owning, from the community standpoint, means progress, the creation of taxable values and the benefitting of nearly every business interest therein. Equitable Home Purchase loan funds, going into a city this way, release local funds for re-investment in new building construction and the extension of local industries. The supply of local mortgage funds is thus added to and the building to meet new housing requirements is encouraged.

At the end of ten years the mortgage will have been paid and the home left free and clear. The life insurance policy is then re-assigned to the borrower. If death intervenes, during the mortgage period, the mortgage is paid immediately by the life insurance and the insurance money in excess of the debt is paid over to the beneficiary. Death is the chief hazard ownership is subjected to and is perhaps the main cause of foreclosure of homes. Under the Equitable's Home Purchase plan, the heirs inherit the home but not the mortgage.

An ordinary mortgage may fall due or be called in at short notice but not the Home Purchase mortgage. It is a great satisfaction for the home owner to know that over ten years if there is no default the payment of his mortgage cannot be demanded.

In times of financial stress, like the present, it is not unusual for lenders who must realize on their mortgages to ask payment in full at maturity, or to ask for heavy payments on account. The borrower may not be able to replace the mortgage and is subjected to embarrassment, and perhaps foreclosure, which might mean loss of his property and savings. Or, in such times, if other funds can be borrowed, bonuses or exorbitant commissions are usually charged for affecting the new loan and not infrequently high interest rates are exacted. The Equitable Home Purchase plan frees the borrower from worry and undue expense by avoiding all necessity of a renewal, or making heavy or partial or

(Continued on Page 12)

San Francisco and Los Angeles Should be Partners, Declares Tynan

In announcing the purchase by the Bethlehem Shipbuilding Corporation of the Southwestern Shipyard in Los Angeles, J. J. Tynan, general manager of the Bethlehem Company's Union Plant, of which the Los Angeles yard will be a branch, said:

"Los Angeles and San Francisco have too much of a common interest in the development of Pacific trade and commerce to be anything but partners. Each has acquired metropolitan growth but if they'll work together for the same ends the results will stagger the world. If for nothing else than to help toward this unity of purpose I am glad that the opportunity has come for the Bethlehem interests to find a home in Los Angeles."

Many people interested in the industrial development of the Pacific slope would like to know something about the future of shipbuilding which, for several years maintained great payrolls which had much to do with the prosperity in other lines.

The best answer to the question "What do you think about the future of shipbuilding?" said Mr. Tynan, "is that we have just bought a new shipyard—in Los Angeles—which will be known as the San Pedro Works of the Union Plant. As to our immediate plans I can say only this:

"When a new demand arises for ships we'll build ships there. In the meantime we'll start immediately to equip the yard with everything necessary to make it one of the most efficient ship repair plants in the world. Shipowners who know us best will tell you that Bethlehem service means added years to the life of a ship and I'm proud to believe that the establishment of a Bethlehem plant or 'service station' in the South will be of great value to the American merchant marine and to the commerce of the Pacific."

Of particular interest to architects and builders is Mr. Tynan's announcement that the Bethlehem Steel Corporation, the second largest steel manufacturing organization in the world, and able to turn out practically everything in the metal line that goes into the construction of a modern building, will carry at the Los Angeles yard a large stock of structural steel. The yard also will be supplied with the machinery for fabricating structural metal of all kinds.

The company also will engage in the manufacture of Diesel engines on a large scale at all its plants and at the San Pedro plant a special department will be maintained for the manufacture of all kinds of oil well equipment.

Home Purchase Plan

(Concluded from Page 11)

total repayments or of a change in his mortgage.

As a rule, borrowers are obliged to pay commissions for securing mortgage funds. In the course of ten years, original costs and loan commissions are added to by renewal charges, or if the mortgage is transferred, by new costs and loan commissions; so that ordinarily the charges incidental to securing and renewing the mortgage over that period are of a substantial amount. No commissions are charged borrowers for Home Purchase loans and there are no renewal charges; thus the ex-

pense is reduced to a minimum. The cash value of the policy at the end of ten years and the annual refunds during that period further materially reduce the cost.

Many men would undertake to pay off their home mortgages if they could pay a little at a time. Through the small monthly Home Purchase instalments, the loan is paid off and the thrifty home owner is able to acquire complete ownership. Numerous rent payers have been encouraged to buy homes by the financing provided by the Equitable's Home Purchase plan, which helps people of moderate means to help themselves. It promotes thrift, independence and self respect, and puts home owning within the means of a vast number of people.

A New Code of Ethics for the Building Industry

THE
BUILDING
REVIEW

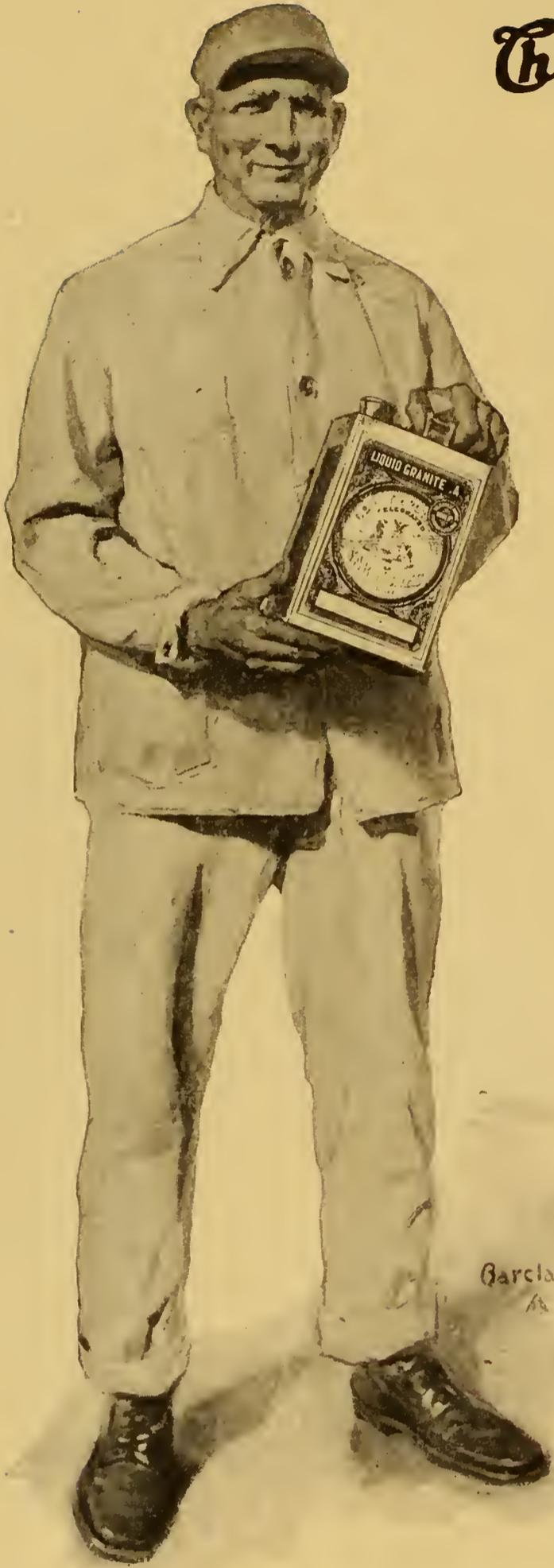


FEBRUARY, 1922

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THE BUILDING REVIEW

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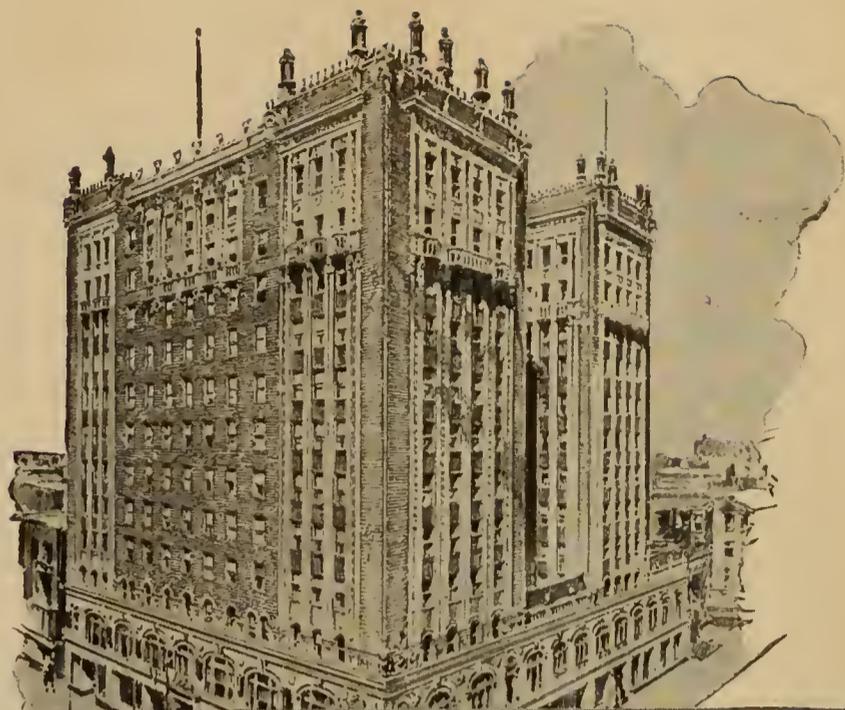
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The BUILDING REVIEW

VOL. XXI.

SAN FRANCISCO, FEBRUARY, 1922

No. 2.

A CODE OF ETHICS FOR THE BUILDING INDUSTRY

*Adopted by the New York Building Congress and Endorsed by San Francisco Chapter,
American Institute of Architects*

The Building Industry, broadly considered, includes the Owner, the Real Estate Broker, the Banker, the Loan Broker, the Architect, the Engineer, the Contractor, and Sub-contractor, the Material Manufacturer and Dealer, and Labor. Among certain of these groups professional codes of ethics have long been in use, but the Congress believes that there is need for the development of a general code that will define fair dealings for all. No set of rules can be formulated which will particularize all the duties of all branches of the industry in their relation to the public and to each other. The following principles should, however, govern and serve as a guide.

GENERAL, ART. NO. 1

SEC. 1. No one engaged in the Industry should by acts, agreements or otherwise do anything that will unduly or improperly increase the cost of his work, product or commodity, nor deliver inferior quality or less quantity of work, products or commodity than engaged or contracted for.

SEC. 2. No one engaged in the building industry in any of its branches, should falsely or maliciously injure, directly or indirectly, the reputation, prospects or business of another. The repetition of rumors, not positively known to be true, is but one degree less reprehensible than the making of a statement known to be false. Nor should attempt be made to supplant another after his employment.

SEC. 3. No one engaged in the building industry should offer or accept commissions intended to influence employment, sales or contracts. Such commissions add an overhead cost which the public must eventually

pay and which has no economic or moral justification.

SEC. 4. Everyone engaged in the building industry should participate in those movements for public welfare in which his training and experience qualify him to give competent and disinterested advice. He should support public officials in the proper enforcement of building codes and safety regulations and should take an active interest in the formulation and improvement of such codes.

SEC. 5. No one engaged in the building industry should resort to or countenance the practice of "Shopping."

By "Shopping" is meant any misrepresentation as to the relation of any bid to another bid, the use of the bid of a bidder to whom the awarder would be unwilling to award the work in order to reduce the bid of an approved bidder, or the use of fictitious bids in the effort to reduce legitimate bids.

THE OWNER, ART. NO. 2

SEC. 1. The Owner is a part of the building industry as his interests are closely bound up with those of the members of the industry with whom he enters into contractual relations. It is, therefore important to him, not only that the principles of fair dealing as between members of the industry should be observed by those whom he employs, but that his own conduct should be guided by the same principles.

SEC. 2. The Owner should realize that the cost of estimating is a serious item of overhead expense, for which he himself must finally pay. He should, therefore, not call for a detailed estimate when an approximate estimate would serve his purpose. Nor should

he call for numerous alternate estimates unless he is seriously considering the use of such alternates. He should not call for estimates from any contractor to whom he would be unwilling to award a contract. In short, he should not expect to receive a service unless it is his intention to give proper consideration therefor, either through the payment of money or by giving to him who renders the service a bona fide opportunity to secure work, professional or contractual. In order that estimates may be intelligently prepared it is necessary for the Owner to see that full information and facilities such as access to site, the use of plans, adequate time, etc., are afforded to all those estimating.

SEC. 3. As the Owner expects to receive full credit information as to those persons with whom he contemplates entering into contractual relations, he should accord the same privilege to them.

SEC. 4. Where an Owner has retained the services of an Architect or Engineer, for full services including supervision, all his business relations with contractors or others engaged upon the work, whether the taking of estimates, the award of contracts, and issuance of orders for changes or instructions to the men in the field, should be carried on through the agency of the Architect or Engineer.

SEC. 5. While the Owner is entirely free to exercise his own judgment as to the employment of an Architect or Engineer or to employ the contractor to make plans and specifications for the building which he is to construct, he should understand that in the latter case, he is placing upon the Contractor the moral responsibility for acting in a judicial capacity with reference to questions which may vitally affect his (the Contractor's) interests. The Contractor, especially on a lump sum contract, should be left free to protect his interests, and not be placed in a position of passing judgment on his own interests in behalf of the Owner.

SEC. 6. Where the Owner has retained the service of an Architect or Engineer, he should understand that after a contract has been let, the Architect or Engineer becomes the official interpreter of the contract and must insist upon its faithful performance by both parties. The Architect acts as designer, supervisor of construction and professional advisor to the Owner, yet, as the disinterested interpreter of the obligations of both parties to the contract, it is his duty to see that both parties fully and promptly fulfill their respective obligations.

THE BANKER, ART. NO. 3

SEC. 1. The Banker, whose funds are those of the public entrusted to his care, is obligated not only to conserve and wisely invest them but also to give due weight to the community value of the improvements for which loans are desired. Especially in times when available funds are limited, he should exercise a wide discretion in placing them where they may produce the greatest community benefit.

SEC. 2. Those charged with the loaning of funds upon buildings should possess or make use of expert knowledge of the construction industry in all its branches. The Lender's requirements as to building details and specifications should be clearly stated to the borrower in advance of making the loan. Loans should be based upon competent plans and estimates of cost. After construction has commenced, the lender should exercise such supervision as to be assured that the borrower is fulfilling his contract obligation, both as regards quality of construction and payments therefor. But in his interpretation of plans and specifications at any time after a loan is accepted and during course of construction he should safeguard the borrower's interests as well as his own wherever the security is not impaired. He should definitely ascertain that Architect and Engineer; General and Sub-contractors; Material men and Labor are being fully paid as the work progresses in accordance with contract obligations.

SEC. 3. The machinery of financing building construction should be as simple as is consistent with the proper safe-guarding of loans. The loan broker who has a sound knowledge of building and real estate values and a right regard for the moral obligations of his calling performs a valuable service to both lender and borrower, but fees or commissions paid to either middlemen or agents who contribute no constructive service are an overload upon the building industry for which there is no economic justification.

REAL ESTATE, ART. NO. 4

SEC. 1. A broker, in presenting the advantages of a property to a prospective purchaser, should not permit his desire to make a sale to affect the accuracy of his statement. His relation to both buyer and seller should be a professional one, and his expert knowledge should be made available to both.

SEC. 2. He should consider the proposed improvement of the site in connection with its community value or its effect upon the neigh-

borhood. The erection of a building which will tend to deteriorate the character of a neighborhood is opposed to the public interest, and should not be furthered.

SEC. 3. He should not attempt to sell land to be improved for a definite use, if he knows that there are sub-soil or other conditions which would render it unsuited to such use or unduly costly therefor.

SEC. 4. In endeavoring to interest a prospective purchaser by recommending a type of improvement and giving estimates of cost of such improvement, or estimates of the return upon the investment in improvements, he should quote no figures which are not prepared by those qualified to estimate construction and operating costs.

SEC. 5. He should not accept commissions from Architects, Engineers or Contractors desirous of influencing retention or contracts.

THE ARCHITECT AND ENGINEER, ART. NO. 5

The Engineer's relation to the building industry is a professional one, so similar to that of the Architect, that the following statement of ethics as applied to the Architect applies equally to the Engineer.

SEC. 1. The Architect's relation to his client is primarily that of professional adviser; this relation continues throughout the entire course of his service. When, however, a contract has been executed between his client and a Contractor, by the terms of which the Architect becomes the official interpreter of its conditions and the judge of its performance, an additional relation is created under which it is incumbent upon the Architects to use his power under the contract to insist upon its faithful performance by both parties.

SEC. 2. The Architect should furnish complete plans, specifications and details in sufficient quantity and should not require the Contractor or Sub-contractor to make any part of such drawings or specifications without payment, other than the usual "shop details". Under shop details are not included general designing, such as of steel or reinforced concrete structures.

SEC. 3. As the Architect decides whether or not the intent of his plans and specifications is properly carried out, he should take special care to see that these drawings and specifications are complete and accurate, and he should never call upon the contractor to make good oversights or errors in them, nor attempt to shirk responsibility by indefinite clauses in the contract or specifications.

SEC. 4. As payments to Contractors are usually based upon the Architect's certificate, the Architect should give immediate consideration to, and prompt action (whether favorable or unfavorable) upon the Contractor's applications for payment. He cannot be a party to any desire on the part of the Contractor to anticipate payments, nor on the part of the Owner to delay such payments, when due under the contract.

SEC. 5. The Architect should not directly or indirectly engage in any of the building trades. If he has any financial interest in any building material or device, he should not specify or use it without the knowledge and approval of his client.

SEC. 6. The Architect should not receive any commission or any substantial service from a contractor or from any interested person other than his client.

THE CONTRACTOR, ART. NO. 6

SEC. 1. In a lump sum contract, the Contractor is entitled to whatever profit he may be able to derive from his ability to make favorable purchases and from the efficiency of his organization but no desire for profit can justify his failure to completely carry out the obligations, both expressed and reasonably implied, of his contract. In a cost plus fee contract, the contractor should regard himself as the Owner's agent and all his work should be conducted with the single purpose of serving the Owner's interest to the fullest extent. His efforts to carry on the work efficiently and economically should be as great as though he were himself to enjoy the resulting benefits.

SEC. 2. In his relations with the Architect, his attitude should be that of helpful co-operation for the Owner's interest. In questions of design or the choice of materials affecting design he should accept the Architect's judgment as that of an expert and endeavor to secure the result desired by the Architect. In questions relating to structural design or arrangement, or to materials and methods of construction, he should feel free to offer helpful suggestions to the Architect. As the Architect is the Owner's professional and technical adviser, he (the Contractor) should not endeavor to influence the Owner against the judgment of the Architect, unless satisfied that the Owner's interests are likely to be seriously jeopardized, and then only after informing the Architect of his intention.

SEC. 3. In cases in which the Architect is charged with the letting of contracts and the issuance of orders for changes, the Contractor

should submit his estimates to the Architect and accept no orders except those issued by him.

SEC. 4. As the General Contractor in seeking a contract expects fair and disinterested consideration of his proposal by the Architect and the Owner, he should grant the same consideration to sub-contractors and material dealers whose estimates he has used in preparing his own proposal. As a general principle, the sub-contractor whose estimate has been used by the general contractor in making his own proposal, is entitled to first consideration in the awarding of the sub-contract. This principle carries with it the obligation on the part of the general contractor to use no estimate of a sub-contractor to whom he would be unwilling to award the work and assume responsibility therefor, in the event of his obtaining the general contract.

SEC. 5. As the cost of estimating is an important element in the overhead costs of the contractor, he is entitled to a frank statement from the architect or owner as to the bona fide nature of the enterprise and the financial ability of the owner to carry it out, before incurring this expense.

SEC. 6. The desire to secure a profitable contract should not be allowed to influence a contractor's judgment or the disinterestedness of his advice. Preliminary advice and estimates should be given with the utmost care, inasmuch as the owner's decision to purchase land and erect a building is likely to rest largely upon such estimates and advice.

SEC. 7. In addition to the safeguards provided by law, the contractor should recognize that a broad obligation rests upon him to see that every reasonable provision is made for the safety and health of his employes and the public.

SEC. 8. In fairness to all elements of the industry the employer should recognize some tribunal to which jurisdictional disputes should be referred for decision.

SUB-CONTRACTORS AND MATERIAL DEALERS. ART. NO. 7

SEC. 1. No Sub-contractor or Material Dealer should knowingly accept an order or contract that is given in good faith to cover complete cost but in reality will involve additional cost because of unusual or special trade or labor conditions or technical terms, the full meaning of which is not appreciated by his customer.

SEC. 2. He should not encourage the prac-

tice of "Shopping" by not submitting bids which are not bona fide.

SEC. 3. It is understood that where applicable the sections of Article 6—in reference to Contractors—should refer also to Subcontractors and Material Dealers.

LABOR, ART. NO. 8

SEC. 1. Labor is a vital part of the building industry and is entitled to a fair compensation for the output. In return for fair compensation, labor, in common with all other factors in the industry, should give the best service of which it is capable, both in quality and quantity of production.

SEC. 2. Arbitrary rules or regulations affecting the number of workmen to be employed or the installation or operation of plant and equipment and tending to artificially increase the cost of building, are economically unsound.

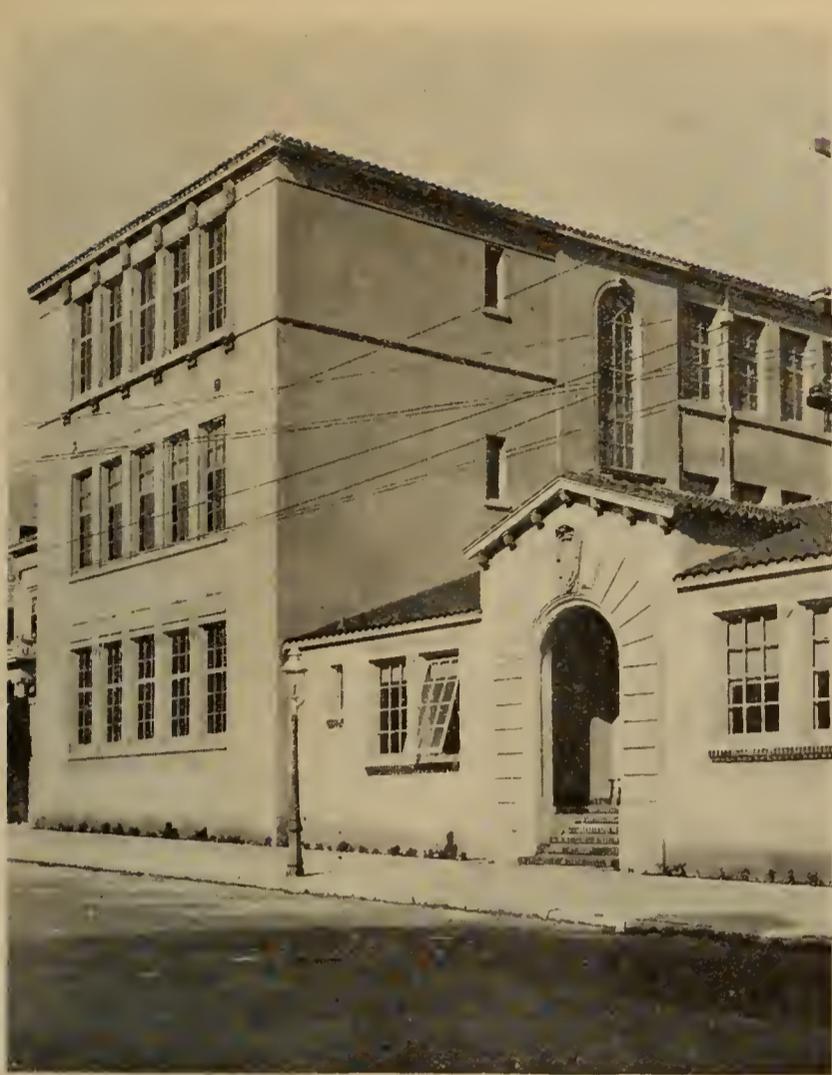
SEC. 3. Every man has the inherent right to choose his trade or occupation. Restrictions which interfere with his right of free choice and his opportunity to learn and qualify in his chosen business, profession, or trade, have no moral or economic justification.

SEC. 4. In the past, the great majority of strikes in the building industry have been due to jurisdictional disputes between Labor Unions. In fairness to all factors in the industry, labor should recognize some tribunal to which such disputes should be referred for decision, and there should be no cessation of work pending the decision.

Mr. J. J. Donovan's "School Architecture" is receiving many notices of appreciation from country-wide sources. A recent letter from Perkins, Fellows and Hamilton, well-known Chicago school architects, has some interesting comments:

"We use your book frequently for reference in regard to equipment, details, dimensions, the facilities which go to make up an athletic field, a laboratory or a shop. It has frequently saved us an expenditure of considerable time which otherwise would be spent in separate investigation. It would be more correct to call it an encyclopedia, because it is a collection of several volumes.

"You have made a great contribution in this book by calling attention to the importance of school building. You have made your readers realize that it is an extremely important and valuable work and that architects undertaking it assume a great responsibility."



JACKSON STREET ENTRANCE
GRANT SCHOOL, SAN FRANCISCO, CALIF.

TWO NEW SAN FRANCISCO SCHOOLS

DESCRIPTIVE NOTES

The U. S. Grant School, Pacific Avenue, near Divisadero St., John Reid, Jr., Architect.

In planning the Grant School, there were many physical difficulties to overcome. In the first place, the ground area of the site was not ample enough to contain a building to satisfy the required program. While the lot in general was level, there was a precipitous drop to the north, making the difference in level on Pacific Avenue on the south end and the Broadway level on the north end about thirty-six feet.

The site was formerly occupied by the old school building of block type with north and south class rooms and built at the extreme south end of the lot. The great disadvantage of this arrangement was that the yard received very little sunlight and as a consequence, was always damp and cold.

One of the first schemes of the new building contemplated a block type at right angles to Pacific Avenue with east and west class rooms. This was abandoned for the adopted plan because it divided the already small yard area into two small courts. The final

plan provides for a single, sunny yard by placing one wing of the building to the west, giving east and south class rooms. The administration wing along Pacific Avenue was made one-story and kept as low as possible to allow the sunrays to reach the yard. To overcome the steep slope at the north end of the lot, the auditorium was dropped below the first floor level and the school building and yard were connected to Broadway by a double flight of outside stairways. In order to obtain more play space, a roof play yard was provided over the north wing on a level with the third floor.

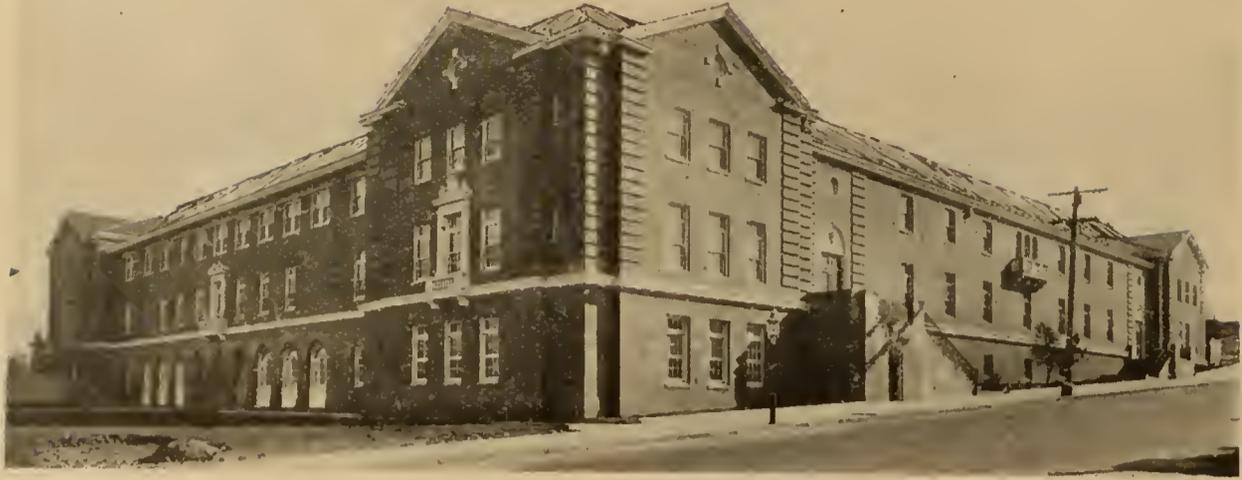
The school provides 18 class rooms, one of which is fitted up for a drawing room; a science lecture room, Manual Training, Domestic Science suite composed of cooking laboratory, sewing room and practice dining-room. The auditorium is fitted with a curtained stage and dressing rooms and is so arranged that it can be used for community purposes without interfering with the school proper.

Special attention was paid to the plumbing and heating work, which is of the highest quality throughout, put in by Antone Lettich.

The building is a re-inforced concrete frame, with stucco exterior finish and tile roof.



STAIR WINDOW
GRANT SCHOOL, SAN FRANCISCO, CALIF.



JEFFERSON SCHOOL, SAN FRANCISCO, CALIF.

J. R. MILLER, ARCHITECT

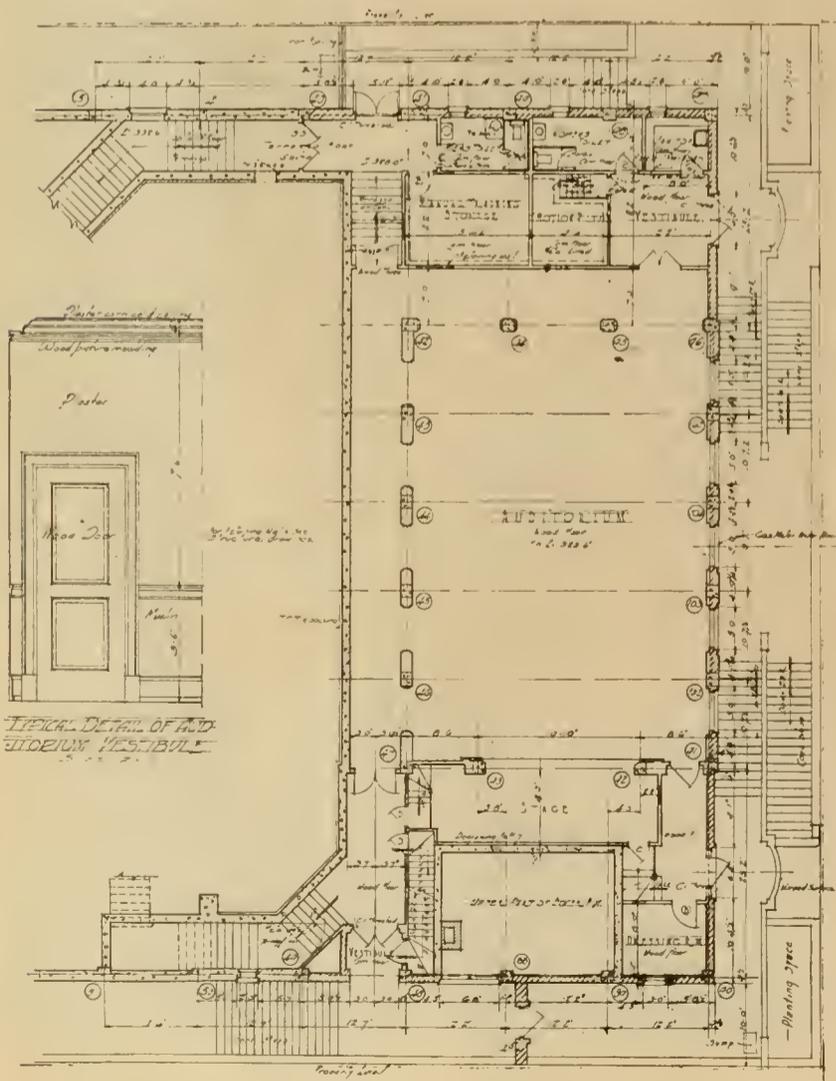
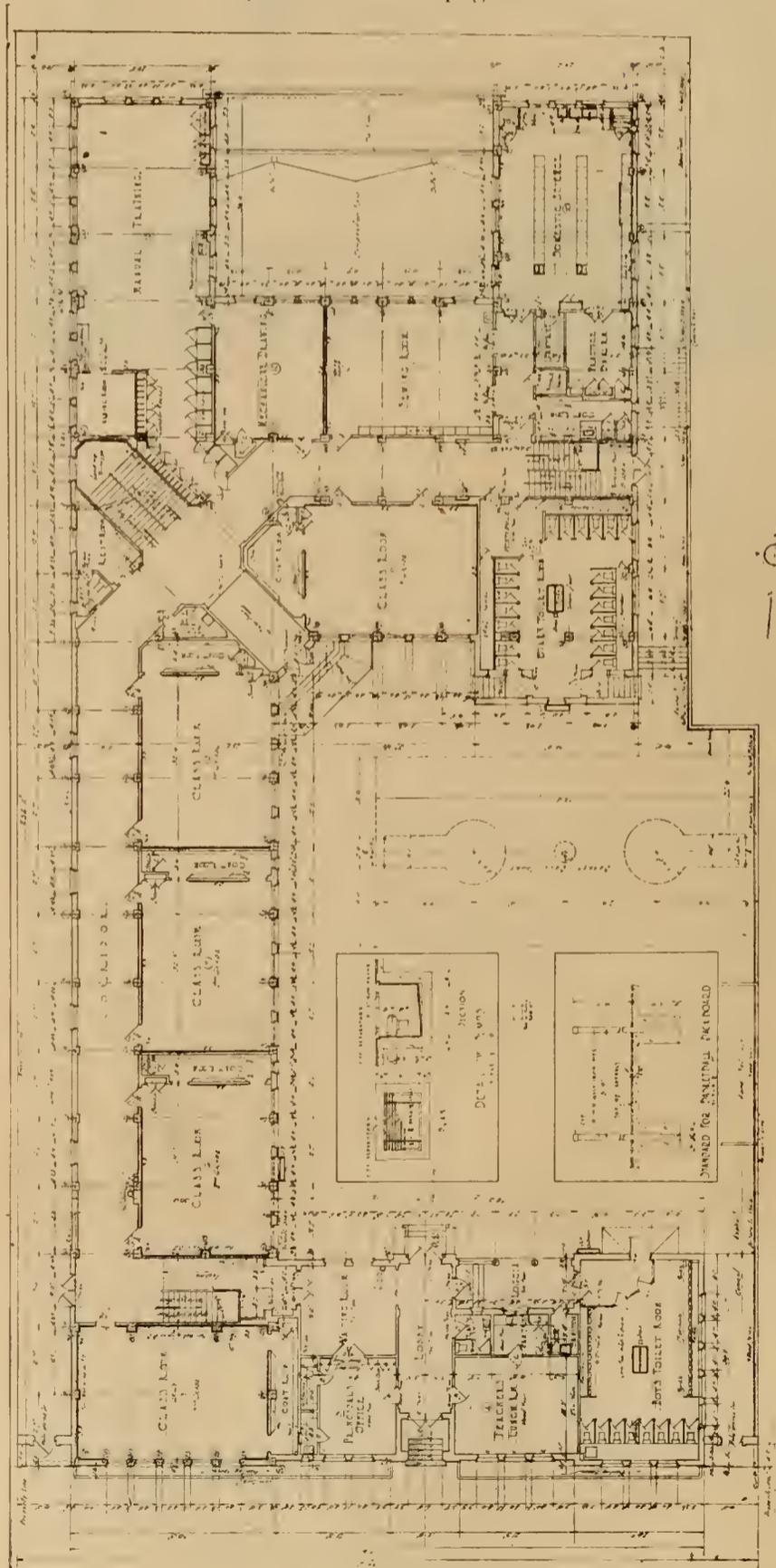
Jefferson School, Nineteenth and Irving Streets, J. R. Miller, Architect

flanking the main entrance were placed in
(Continued on page 20)

Owing to strong winds from the ocean, un-built sand lots, to the west, and the cool northern exposure, all class rooms were made to face the south and east. The building in this way framing a well protected, sunny playground or yard.

The main entrance was placed to the north or Irving street. An entrance court facing this street will eventually be formed when an Auditorium balancing the Library is built.

Owing to the grade on 18th and 19th streets, a full story below the main floor was obtained at the lower end. The Manual Training and Domestic Science departments



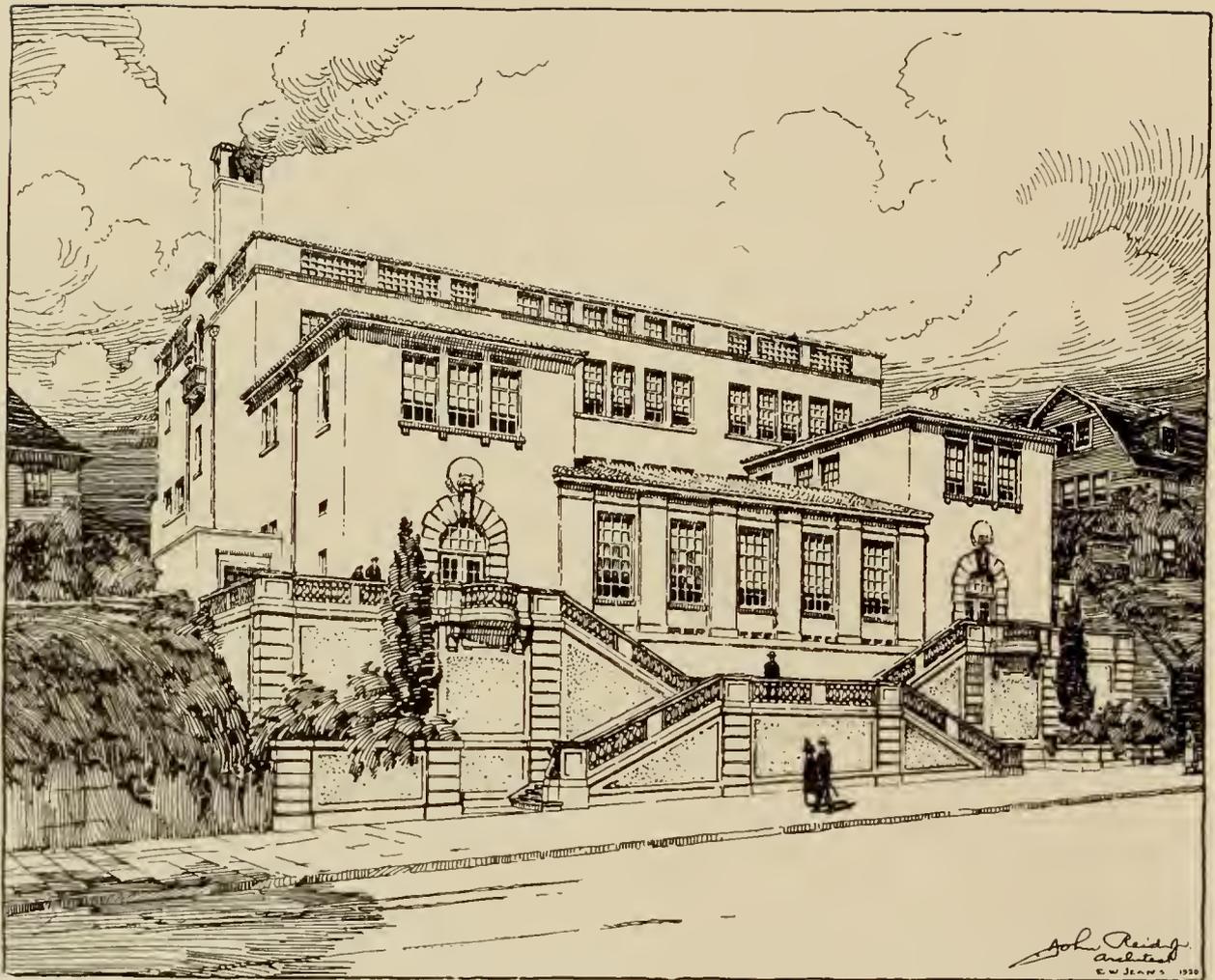
BASEMENT PLAN
GRANT SCHOOL, SAN FRANCISCO, CALIF.

MAIN FLOOR PLAN
JOHN REID, ARCHITECT



PACIFIC AVENUE FACADE

GRANT SCHOOL, SAN FRANCISCO, CALIF.
JOHN REID, JR., ARCHITECT
Anderson and Ringrose, General Contractors
Antone Lettich, Plumbing and Heating



ORIGINAL SKETCH



DOMESTIC SCIENCE ROOM

GRANT SCHOOL, SAN FRANCISCO, CALIF.
JOHN REID, JR., ARCHITECT
Anderson and Ringrose, General Contractors



PACIFIC AVENUE FACADE



AUDITORIUM

GRANT SCHOOL, SAN FRANCISCO, CALIF.
JOHN REID, JR., ARCHITECT
Anderson and Ringrose, General Contractors



COURTYARD, LOOKING WEST



COURTYARD, LOOKING EAST

GRANT SCHOOL, SAN FRANCISCO, CALIF.
JOHN REID, JR., ARCHITECT
Anderson and Ringrose, General Contractors

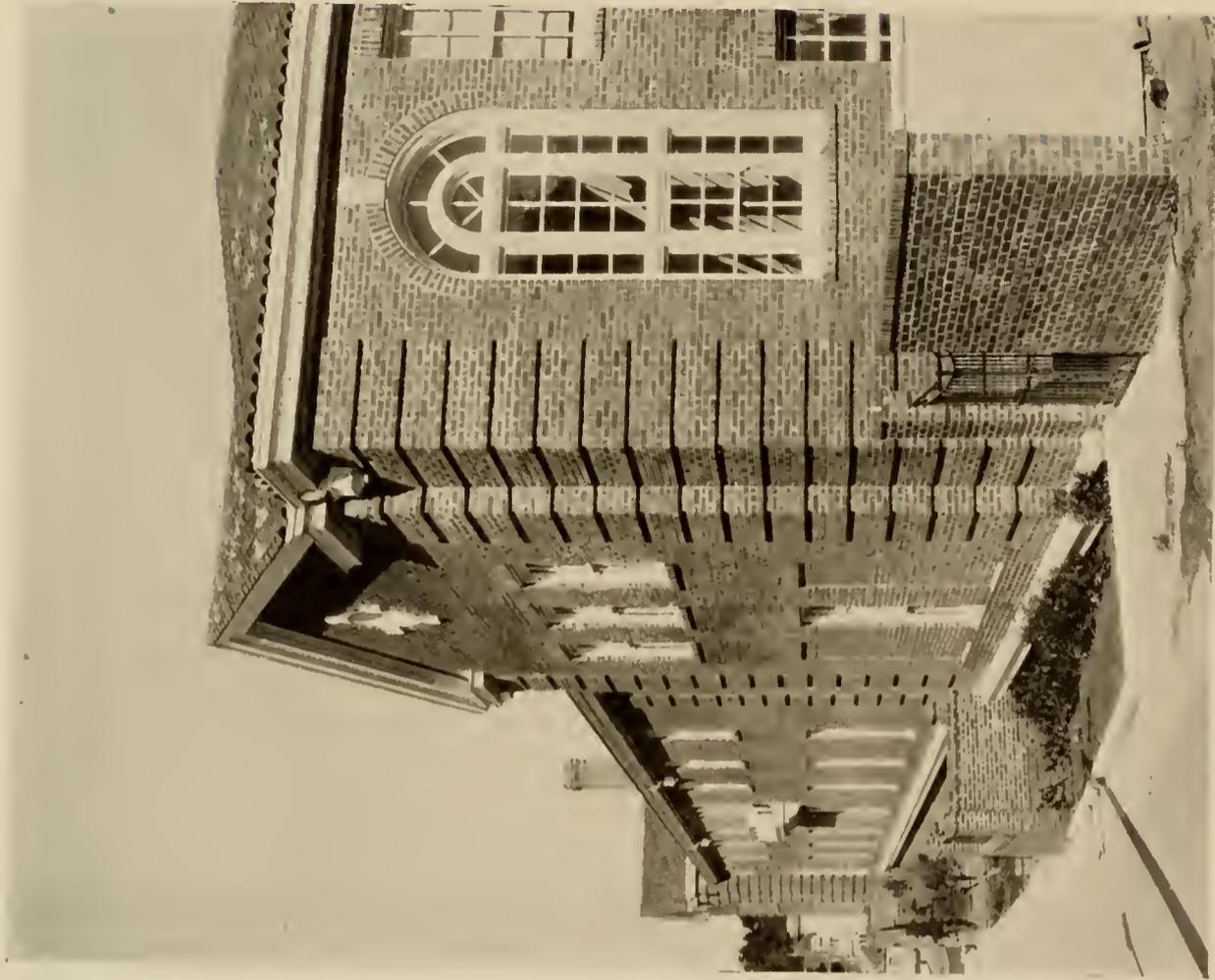


CORNER PAVILION

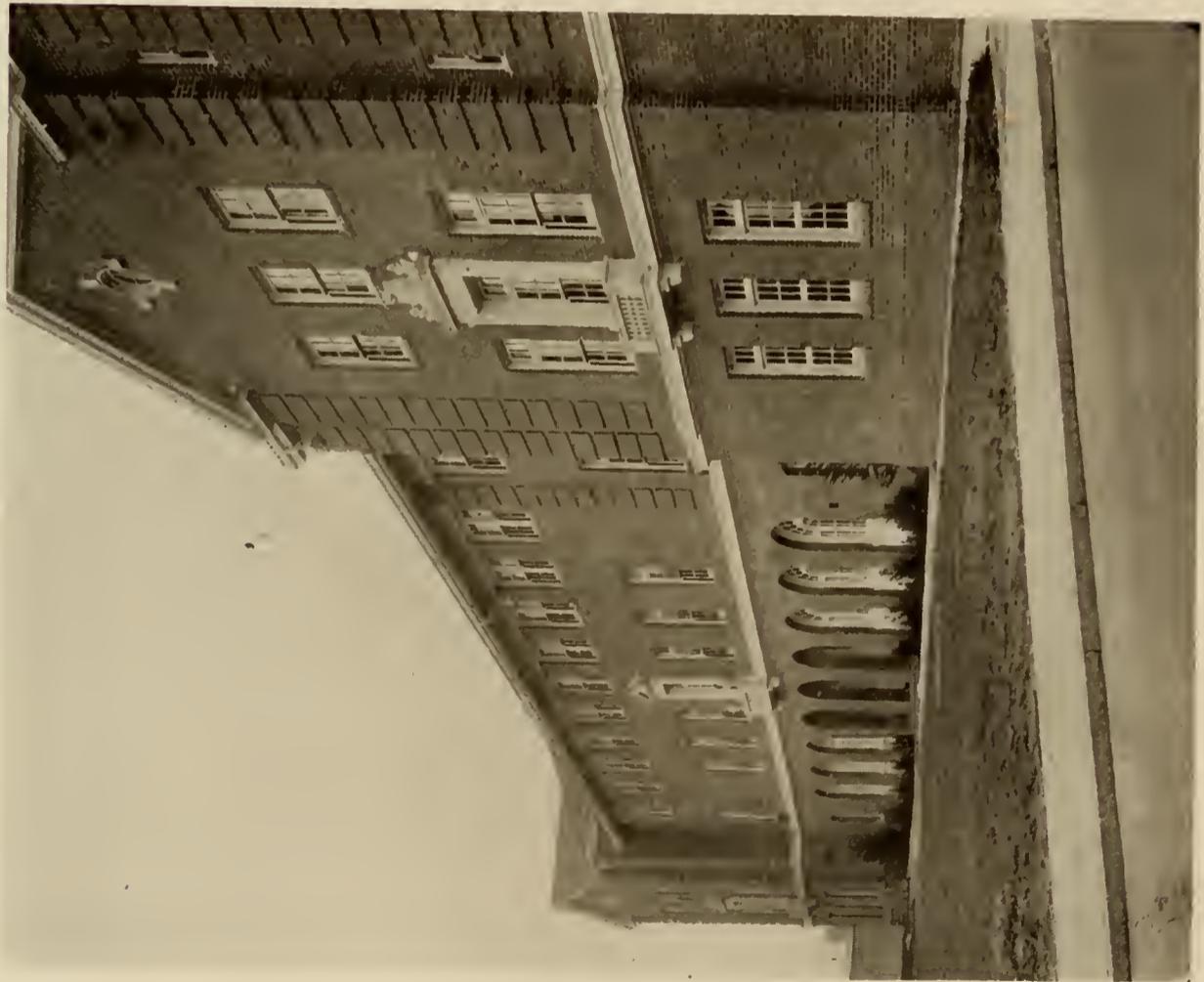


MAIN ENTRANCE

JEFFERSON SCHOOL, SAN FRANCISCO, CALIF.
J. R. MILLER, ARCHITECT
Monson Brothers, General Contractors



NINETEENTH STREET FACADE



IRVING STREET FACADE

JEFFERSON SCHOOL, SAN FRANCISCO, CALIF.
J. R. MILLER, ARCHITECT
Monson Brothers, General Contractors

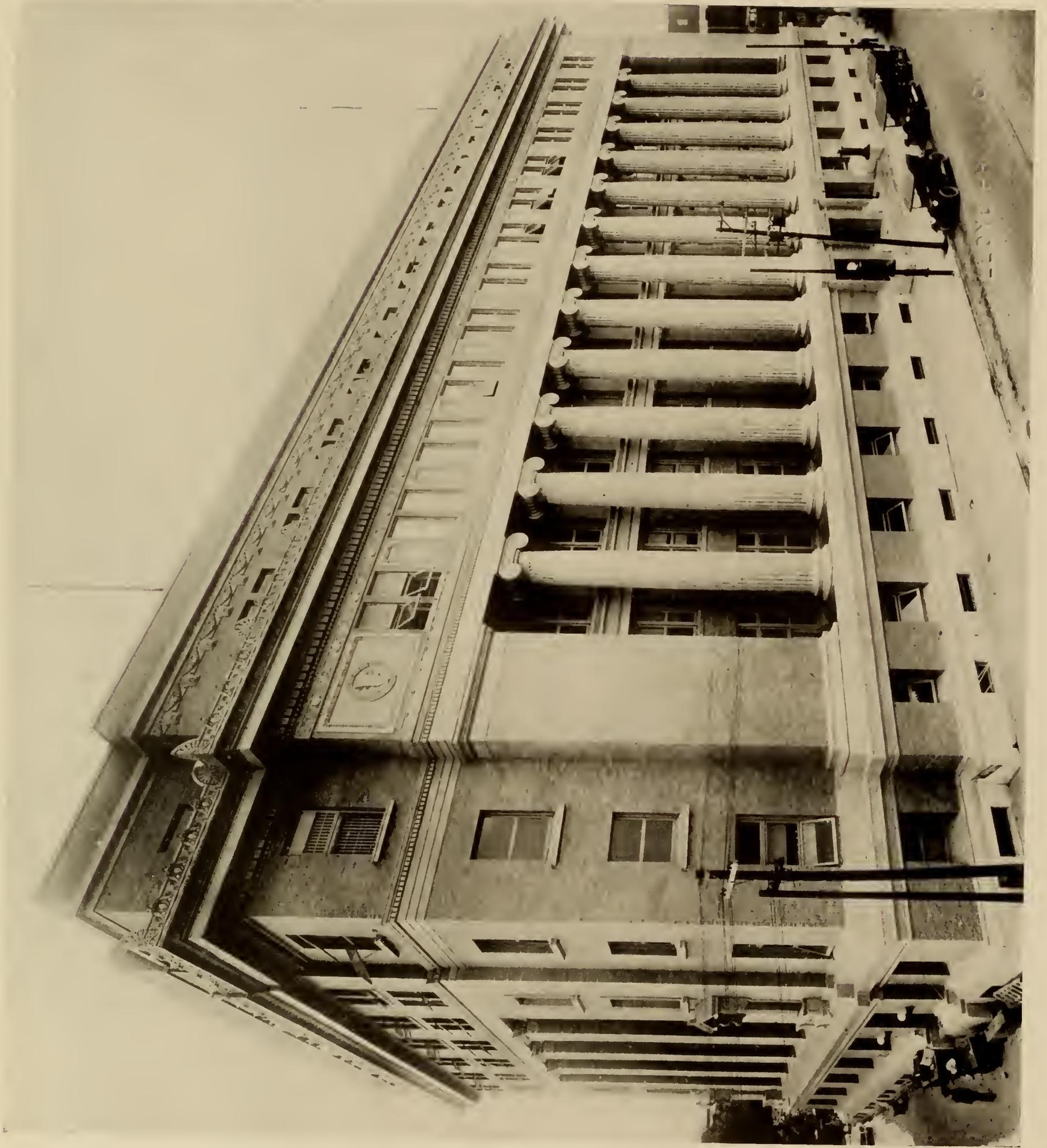


NINETEENTH STREET FACADE



COURTYARD

JEFFERSON SCHOOL, SAN FRANCISCO, CALIF.
J. R. MILLER, ARCHITECT
Monson Brothers, General Contractors



EL PASO COUNTY COURT HOUSE
EL PASO, TEXAS
TROST & TROST, ARCHITECTS AND ENGINEERS



EXERCISING CORRIDOR OR ROOF GARDEN FOR PRISONERS

EL PASO COUNTY COURT HOUSE
EL PASO, TEXAS
TROST & TROST, ARCHITECTS AND ENGINEERS



COURT OF APPEALS



COUNTY COURT AT LAW

EL PASO COUNTY COURT HOUSE
EL PASO, TEXAS
TROST & TROST, ARCHITECTS AND ENGINEERS



65TH DISTRICT COURT ROOM



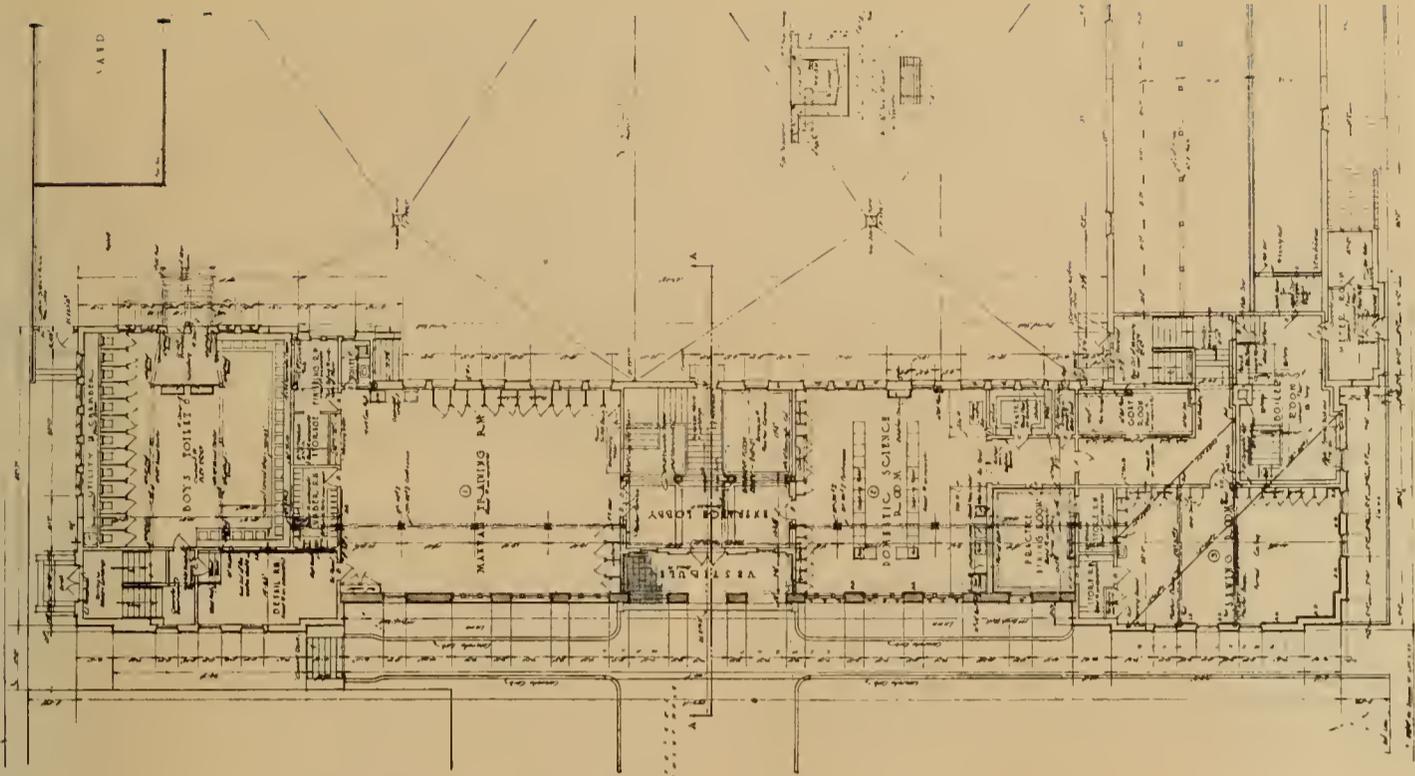
CORRIDOR AND STAIRWAY

EL PASO COUNTY COURT HOUSE
EL PASO, TEXAS
TROST & TROST, ARCHITECTS AND ENGINEERS

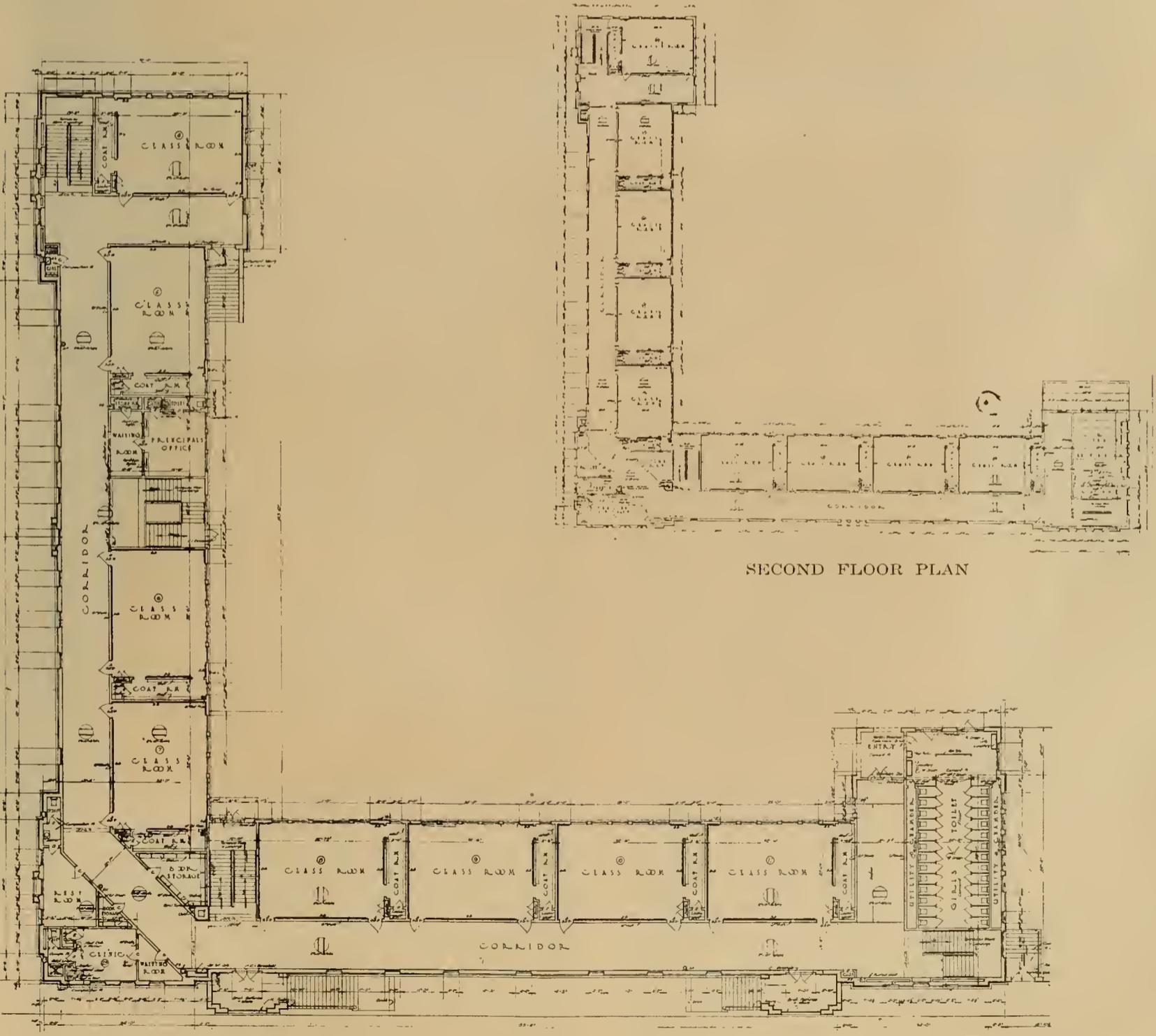


RESIDENCES AT CHICO, CALIFORNIA
CHESTER COLE, ARCHITECT

THE BUILDING REVIEW



BASEMENT PLAN



SECOND FLOOR PLAN

FIRST FLOOR PLAN

(Continued from page 18)

here. These rooms have north and south exposures and in this way splendid cross circulation is obtained for the Domestic Science department. This story also contains a model Dining Room and Sewing Room.

The Principal's office is placed in the first floor at the main entrance where she has perfect supervision over the yard.

A teacher's lunch room and kitchenette, a pupil's rest room and clinic and a science lecture room have been provided.

The north corridor on second floor has been arranged with large windows and made especially wide to provide a sort of exhibition gallery for showing drawings of pupils, the school having a reputation of a high grade of drawing.

A sand lot has been left in the yard where pupils are taught to make relief maps. This is also used as a play space for smaller children.

The toilets have been placed in the wings at both ends of building where three exposures are obtained and give a perfect natural ventilation.

Corridors are arranged so that future extensions can be added, making eventually a square or "U" shaped plan around a court.

COMMUNITY SPIRIT AND THE HOME

By HAROLD C. WURTS

The foundation of all true civic development is community spirit. Constructive work cannot be carried on without it. Enrich the community and you enrich the individual in it. Enrich the individual and you enrich the community. The two are essential to each other. One is a unit of which the other is composed. The other is the complex upon which the unit is dependent. Destroy one and you partially or entirely destroy the other. Work at opposite interests and the benefits derived by one are only offset by the damages done by the other. It's like the blind farmer who faced his team in opposite directions and wondered why the wagon didn't move.

The same is true of individuals of a community. They must co-operate to accomplish, they must find common interests and devote a part of their time to them.

An interesting phase of the community spirit is being worked out in the Lakeshore Highlands Association, in Oakland, Cali-

fornia. The residents of this new home district organized. They decided, among other things, that they must have public play places for their children. They realized that play is essential to normal child growth and that space and fresh air are essential to play. They inaugurated play-park improvements and they not only aided the healthy growth of their children but they established a bond of interest that will make the association a lasting one.

Any community to be successful, to grow, must have bonds of interest. Unless you get interest, you don't get service. What interest could bind mothers and fathers together more than the interest in their children? Association has established, as an ideal, community play-parks to be dotted throughout the entire district. It is through play that the child develops both mentally and physically. It is through play that he establishes his ideals. Every child has certain inherent instincts. These instincts must be developed and directed along the right lines to mould the children of today into the citizens of tomorrow.

Time was when children could play in the streets of home districts without endangering their lives. The baseball park was the street in front of the homes. "One foot off the gutter" was a favorite game. And can't you remember dodging behind a telegraph pole when playing "Nigger Baby"? But today automobiles whizz recklessly up and down these same streets, the fact that it is a home district makes no difference in the speed of the driver. Little children are being run down daily. The only solution is the play-park. Home districts must have them. They must do as the Lakeshore Highlands Association, and take as an ideal the establishment of play-parks throughout their community. It will give them a bond of interest, organize them so that they will work together for further improvements and it will make safe places for their children to play. In choosing your homesite you should consider this. Build in a district where your homesite is protected not merely for a number of years but permanently. Build where there are play-parks and where there is community co-operation. Encourage other people to build in places such as this. If you are an architect, or if you are a builder, point out the advantages of such a district. It will help you sell homes, it will help you sell plans and it will make for better communities.

THIN PARTITION, A NEW ECONOMY IN MODERN CONSTRUCTION

By RALPH H. BUTZ

Efficiency, the goal of every successful modern industry, is growing to be more and more of an objective point in the building industry. Due to the increased cost of construction, many building practices, originated when labor was cheap and material plentiful and low priced, are being discarded in favor of equally sound but more economical methods whereby every ounce of efficiency of the materials is utilized to the fullest extent.

This is particularly true of partitions; the two foot walls of the Middle Ages having been gradually reduced in thickness, until we today have the two-inch partition, which successfully meets every practical requirement asked of it under the conditions ordinarily occurring.

Not only do these skeletonized partitions effect a large reduction in building costs, but the saving in space, in office buildings and hotels runs into thousands of dollars. It is an important item in sections where ground space is at a high premium.

Many builders and contractors, while quick to concede the economy of these two-inch metal lath and plaster walls, have been somewhat dubious as to the sound proof qualities of these thin partitions. The University of Illinois undertook to make a careful and scientific analysis to determine the exact degree of sound proofness of such partitions.

The investigation began nearly two years ago. No apparatus was then obtainable which would positively measure the various amounts of sound transmitted through various partitions.

The Rayleigh resonator was finally adopted, this device consisting of a brass tube in which was suspended by a quartz thread, a mirror in which moved at an angle relative to the intensity of the sound entering the brass tube.

So delicate is this instrument that it will respond to a force that would require four hundred and sixty-five years to raise a sheet of writing paper one foot in the air.

In two basement rooms, separated by two isolated 9-inch brick walls, four different types of partitions were then erected: (1) 2-inch solid metal lath and plaster. (2) 2-inch plaster board and plaster. (3) 3-inch plaster blocks, plastered on both sides. (4) 3-inch plaster blocks plastered on both sides

and with the air holes in the blocks filled with plaster.

In one room a modified organ pipe was placed to produce sound, great care being taken to keep the air pressure with which the pipe was blown, constant throughout the tests. A reflector was placed behind the pipe to direct the sound upon the test partitions. In the other room the Rayleigh resonator was installed.

The purpose of the test was to determine scientifically the minimum thickness of plaster partitions at which sound proof efficiency was reached, and the results show that the two-inch partition was the most sound proof of the four types tested, the relative intensity of sound transmitted being only 0.93, while for the three-inch plaster blocks (Test 3) it was 3.85.

This test clearly demonstrates that modern building efficiency is best obtained by the use of properly constructed thin partitions, and not by the obsolete and costly partitions that have been used before the word efficiency was so full of meaning as it is today.

OFFICE UTILITY COMBINED WITH GOOD ADVERTISING

An office that looks like a kitchen is being installed by the Petrium Sanitary Sink Co., manufacturers of a patented sanitary sink, at their plant at Fifth and Page Streets, Berkeley, California.

When it came time to remodel the firm's general offices W. C. Goodwin, secretary of the company, conceived the idea of combining office utility with good advertising.

So a large part of the outer office has been made into what appears to be a portion of a kitchen. The central feature of the display is a Petrium sink, the glossy, snow-whiteness of which will be matched by enameled woodwork and tiled-paper wall-coverings.

Dummy windows are being put in and they are to be hung with kitchen curtains. Even the safe is to be camouflaged in white-enamel to give the appearance of a refrigerator and the drawers below the sink are designed to serve as filing cases.

When completed the display will give an excellent representation of a modern, model kitchen and a graphic demonstration of the way the Petrium Sanitary Sink takes its place with other modern, popular pieces of equipment for the kitchen, as well as affording utility as office space.

EDITORIAL

The public entrusts the Architectural Profession with the expenditure of vast sums of money.

But the public does not understand the complexity and magnitude of work involved in fulfilling an architectural commission.

A structure which is well built, suitable for its purpose, and pleasant to inhabit is regarded more often than not as a sort of natural growth, such as a tree.

The architect is today exactly what he was in olden days. He is the Master Craftsman, the Master Builder. His work is done, however, behind closed doors, in his studio, and his skill is therefore forgotten, and his labors are overlooked.

The public chiefly looks at the appearance of a finished building. But the work of the architect goes far beyond the aesthetics of design. Safety, convenience, warmth, ventilation, sanitation, and numberless other details in methods of construction and equipment have to be provided by his expert knowledge and careful thought.

There is no great profession which receives so little public acknowledgement as that of Architecture.

The reason is possibly that architecture is looked upon as a very specialized subject, or as one which is chiefly of antiquarian interest.

The public understands what building is, but it does not realize the essential connection between building and architecture. An ignorance in respect to architecture is not looked upon as a lack of culture, as it would be if it were displayed in literature or painting.

Architecture needs to be recognized as a living progressive art in which there is infinite possibility of development. The antiquarian interest is confined to the revelation it permits of past civilizations.

Public interest in architecture is of immense national importance, for architecture infallibly records the spirit of the community in which it is produced.

The excerpt from an advertisement of an English construction firm, printed above, is a forceful statement of a general situation which applies fully as much in this country. It points the way to constructive public information.

SAN FRANCISCO CHAPTER, AMERICAN INSTITUTE OF ARCHITECTS

The regular meeting of the San Francisco Chapter of the American Institute of Architects was held on Thursday evening January 19th, 1922, in the Architectural Club Rooms, 77 O'Farrell Street. The meeting was called to order by the President Geo. A. Applegarth.

The following members were present:

Harris Allen, J. J. Donovan, Geo. A. Applegarth, B. S. Hayne, Henry Meyers, J. S. Fairweather, Morris Bruce, A. Evers, A. G. Headman, H. R. Lake, J. T. Narbett, Arthur G. Scholtz.

Minutes: Minutes of the meeting held December 15th, 1921, were read and approved.

Old Business: The Chapter voted unanimously to change the Code as requested by the Institute, Section Four, Article Four, leaving out the words "suspension or."

New Business: Mr. Henry H. Meyer read a tentative report on Building Relations.

The Public Information Committee submitted the following resolution which was adopted by the Chapter:

Whereas: A Code of Ethics has been prepared by the New York Building Congress to define fair dealings for all concerned in the Building Industry, to include the Owner, the Banker and the Loan Broker, the Real Estate Broker, the Architect and Engineer, the Contractor and Sub-contractor, the Material Manufacturer and Dealer, and Labor which may be summed up as follows:

General. Article 1, Sections 1 to 5. Advice against improper conduct affecting cost and quality of work and methods of obtaining employment.

Owner. Article 2, Sections 1 to 6. Advice against requiring unnecessary work or unfair decisions.

Banker and Loan Broker. Article 3, Sections 1 to 3. Advice against incomplete knowledge of building construction and public need therefor, and against illegitimate commissions.

Real Estate Broker. Article 4, Sections 1 to 5. Advice against misrepresenting conditions or accepting commissions to influence sales.

Architect and Engineer. Article 5, Sections 1 to 6. Advice against incomplete service and responsibility, and unprofessional conduct.

Contractor and Sub-Contractor, Articles 6 and 7, Sections 1 to 8 and 1 to 3. Advice against violating contract obligations to make more profit; against bad relations with architect, sub-contractor and labor; against misrepresenting costs; against neglecting safety.

Labor. Article 8, Sections 1 to 4. Advice against inadequate service; against economically unsound rules and restrictions; against the stoppage of work under arbitration of jurisdictional disputes.

Be it Therefore Resolved: That the San Francisco Chapter, American Institute of Architects, heartily endorses the above Code of Ethics, and authorizes its publication to all concerned within this jurisdiction.

Moved and seconded that the Chair appoint a committee to consult with the Railroad Commission in regard to lowering freight rates on building materials.

A letter from the Chamber of Commerce in regard to new members received and placed on file.

Adjournment. There being no further business the meeting adjourned.

Respectfully submitted,
J. S. Fairweather, Secretary.

WASHINGTON STATE CHAPTER

The Washington State Chapter American Institute of Architects held its annual meeting at the Washington Hotel, Seattle, January 21st, 1922. Between seventy and eighty architects from the various centers of the state were present. Following the election of officers for the ensuing year many reports were read which indicated that the chapter had been active throughout the year and material progress had been made toward a better order of things in whatever it had undertaken. This was particularly indicated in the report of the committee on education, public information committee, building materials committee, farm buildings and farm landscape committee, housing committee and others. Carl F. Gould of the firm of Bebb & Gould, Seattle, was chosen president; Louis Baeder, Seattle, first vice president; Frederick Westcott, Spokane, second vice-president; A. J. Russell, Tacoma, third vice president; Harold O. Sexsmith, Seattle, secretary; Carl Siebrand, Seattle, treasurer; executive committee member, Charles H. Alden; delegates to institute convention, Harlan Thomas, F. A. Naramore and J. H. Schack.

INDUSTRIAL

FEDERAL RESERVE BANK FINDS
OUTLOOK BRIGHTER

John Perrin, Chairman of the Federal Reserve Board, San Francisco, has issued an optimistic summary of business and agricultural conditions in the 12th Federal Reserve District which is reproduced in part as comfort for those who may still be battling with problems of readjustment. Of particular interest in the report is his reference to building activities, which, so far in 1922, exceed by 155 per cent the record of last year up to the same date.

"Prices for most of the principal *farm products* of this district have risen materially since the first of the year. Wheat, wool and all kinds of livestock benefited particularly, as did also the citrus fruits, but the latter at the expense of damage by killing frosts and winds estimated as high as 50 per cent of the anticipated crop.

"The *lumber* industry of the district continued to improve during January, increases being registered in production, shipments and orders received, both as compared with the months of December and January, 1921. The cut of the largest lumber association in the district for the week ending February 11th (134 mills reporting) was only 11 per cent below normal. The export movement of Douglas fir during 1921 (455,233,000 feet) exceeded by 5,000,000 feet the exports of 1920. In the *mining* industry the noteworthy development was announcement of decisions to resume operations by five of the principal copper companies of Arizona which have been closed since May, 1921. Their resumption will mean that seven of the fifteen principal copper mines in this district will be in operation.

"*Petroleum* production in California, although decreasing 3 per cent in January, compared with December, 1921, still outruns consumption and stocks are

now at the peak (since the low point of December, 1920) of 36,000,000 barrels.

"*Employment* conditions during January were practically unchanged as compared with December with much unemployment in mining centers, in metal trades, at the shipyards and among unskilled workers. Real improvement is anticipated with the resumption of farm work and other out-door labor in the spring.

"In the field of *commerce and trade* improvement is apparent in the returns covering the movement of exports and imports through the principal ports of the district during the last six months of 1921.

"*Retail trade* as reflected in reports from 33 department stores in the leading cities of the district continues to exceed in volume that of a year ago. The decline in value of total January sales of these department stores, when compared with January, 1921, was only 6.3 per cent whereas these stores report average price declines during the period considerably in excess of this percentage. The improvement in the *wholesale trade* which began to be apparent in October, 1921, continues.

"Building activity in the district has again reached record proportions, exceeding by 13,900,000, or 155 per cent, the value of operations reported for January, 1921. Of the 20 cities reporting, 14 advise a larger number of permits issued during January, 1922, than during January, 1921. *Business failures* during January, following the national trend, were larger in number than for any month within recent years. The *volume of business* being done throughout the district generally as measured by debits to individual accounts for January continues larger than it was a year ago. The value of these debits during

(Concluded on page 24)

SOME NEW TOOLS AND FIXTURES

Architects, contractors and builders will be interested in the announcement by the Detroit Steel Products Company, Detroit, Michigan, of a new basement window of steel for use in residences, stores and apartments. This window it is claimed admits 40 to 50 per cent more light than the wooden window of the same size, on account of narrow rolled steel bars in frame and sash, which allows larger glass lights. Another advantage is that the steel is unaffected by moisture and will not warp or stick. The window comes already assembled and painted. There is no planing, fitting or loss of time in fitting the frame into place.

A combination electric drill and grinder has been developed by the Wodack Electric Tool Corporation, Chicago, Illinois. This tool drills both wood and metal and the grinding attachment covers all average needs. The motor develops one-half h.p. under load and has two speeds, one for drilling and one for grinding. This motor is of the Universal type and may be operated on direct and alternating current of the same voltage.

A new 16-inch band saw has been put on the market by J. D. Wallace & Company. The saw is equipped with disc steel wheels and is ball bearing throughout. An attractive feature is the enclosed motor built into the machine and directly connected to the lower wheel by a fabroil gear and steel pinion. Both gears run in oil. The centrifugal force throws this oil into the bearings and keeps them well lubricated. The saw is portable and operates on electric light circuit. It can be moved from job to job, saving labor and power. No special tools are required for adjustments. The saw will handle and stock from the smallest piece to the hardest wood 8 inches thick.

OUTLOOK BRIGHTER
(Concluded from page 23)

January, 1922, in 20 principal cities was about 8.3 per cent less than it was in January, 1921, as compared with a decline of 21 per cent in wholesale prices and slightly less than this figure in retail prices during the same period."

The Southern California edition of the *Architectural Digest** has been received, and is a collection of views of recent work of all kinds, representing most of the established architects of the south. It is exceedingly well done, being, in fact, almost an "edition de luxe" with its excellent printing and handsome stock.

*J. C. Brasfield, Los Angeles, Calif.

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WHY AMERICAN SHIPS NEED HELP

In view of the fact that President Harding has recommended to Congress assistance for a great American Merchant Marine in form of a subsidy and other aids, and because the Pacific Coast has taken the initial steps in the plan for the turning of the Merchant Marine to provide ownership, the following extracts from a speech delivered in Cincinnati recently by United States Senator Joseph E. Ransdell will be of interest.

Senator Ransdell's speech was made for the purpose of pointing out the need for aid for American shipping.

British ships alone are carrying more of our foreign trade than our own vessels, and the same is true of the combined shipping of the other foreign countries engaged in commerce with the United States.

Although 1921 was a year of great depression in shipping, more than \$300,000,000 in ocean freights was paid to foreign vessels engaged in carrying goods to and from the United States, while the share of the American Merchant Marine was not much more than half the amount.

"At present, he said, "less than a third of our overseas commerce is carried in American ships. We should get 50 per cent of it.

"In general, economists figure that ocean freight charges average about eight per cent of the value of the goods carried. On this basis, by making an analysis of the returns of the Department of Commerce, it is possible to figure out what was paid for shipping to various nations engaged in trade with this country. For the calendar year 1921 the freight moneys divided among three classes of shipping were as follows: American, \$171,000,000; British, \$172,000,000; others, \$135,000,000; total, \$478,000,000. Of this large sum paid for freight, 36 per cent went to British vessels, 35 per cent to American, and 29 per cent to the ships of all other countries combined. The division of earnings by flags was as follows in millions of dollars: British, 172.3; American, 171; Japanese, 33.6; French, 20.1; Norwegian, 18.8; Dutch, 18.5; Italian, 14.3; Danish, 6.2; Swedish, 6.1; Spanish, 5.7; Belgian, 2.8; German, 1.4; and others, 7.1. In addition to

this vast sum of \$307,000,000 paid to foreigners last year for freight on our commerce we sent them more than \$100,000,000 for marine insurance—a total payment to foreigners of \$407,000,000 in 1921 for marine freight and insurance, at least one-half of which should have been kept at home.

"A cursory analysis of trade returns shows that American shipping is not standing up under competition, and that matters are growing worse instead of better.

"We were carrying 50 per cent of our trade in our own ships two years ago. We have now reached the point where British ships are carrying more of our trade than we are.

"It is manifest that we are letting our ocean carrying trade slip away from us and that if nothing is done to aid our Merchant Marine we may cut an even smaller figure on the seas than before the war, when less than 10 per cent of our trade was American carried.

"American ships are your delivery wagons; they belong to you; you are vitally interested in their success; their officers and crews are citizens of the United States who pay taxes and perform the same patriotic duties as other citizens of the Republic. The ships of the British, our chief maritime rivals, pay no taxes in America to sustain our schools and churches, our Government and civilization; the wages earned by British crews go to make homes in Britain, while our sailors make American homes; the earnings of British ships pay interest on capital and insurance to British companies, while our ships earn a return for American investments and American insurance companies.

"A strong merchant marine is essential to an effective navy.

"Foreign commerce requires the combined efforts of three servants—finance, insurance, shipping—and all three must work together in order to get the best results. Love of country and national pride should make us give the preference to our own ships. It is a glorious thing to have the Stars and Stripes floating over American vessels in every port

(Concluded on page 26)

HOW LABOR COST IS DIVIDED

The following figures, showing the percentage which the amount paid to each labor group bears to the total labor cost of a six-room house, were prepared for the Building Review by the Building and Housing Division of the United States Department of Commerce:

Trade	TOTAL LABOR COST 100 PER CENT	
	Frame House	Brick House
Carpenter	49.6	32.2
Bricklayers	6.2	21.5
Hod carriers	2.2	6.7
Plasterers	7.9	8.8
Plumbers	8.7	7.6
Electricians	2.6	2.5
Painters	10.0	6.3
Common laborers	6.3	9.9
All others	6.5	4.5
Total	100.0	100.0

These averages were constructed from reports covering a large number of six-room brick and frame houses throughout the country.

The relation of the amount paid to the various groups to the total labor cost varies according to the types of construction prevailing in the various localities; however, these averages give a fair view of the general distribution of labor costs.

AMERICAN SHIPS
(Concluded from page 25)

in the world, familiarizing mankind with our flag of freedom, and distributing our commerce in every land.

"President Harding said at his Marion home in September, 1920, 'I want to promise you that one of the first acts of the incoming administration will be to unfurl the flag on all the paths of the seas.' Our President is doing his utmost to keep this promise towards our marine and every patriotic American should assist him."

TELL THIS TO THE VISITORS

The Tourist and Convention League estimates that over 400,000 people will visit San Francisco to attend the thirty-nine conventions which meet here in 1922. Here are some facts about our city that might come in useful when one of these visitors begins asking questions.

San Francisco had 2,360 factories in operation on January 1, 1920. This is the preliminary statement of the 1920 census of manufacturers covering the year 1919 recently announced by the United States Census Bureau.

Material used in these manufactures were valued at \$261,418,000 and the selling value of the finished products was \$417,321,000.

At the present time, according to the San Francisco Chamber of Commerce, there are 2,652 factories in operation in the city of San Francisco with a combined output valued at more than \$700,000,000.

During 1920 San Francisco enjoyed 3,329 hours of sunshine, and the mild climate and good living conditions make labor efficiency higher in San Francisco than in any other large city in the United States.

JOHNS-MANVILLE, INC., SHOW
FAITH IN IMPROVED CON-
DITIONS BY RESTORING
FORMER WAGE SCALE

Johns-Manville, Inc., the largest producers of asbestos products in the world, last month notified employees, whose salaries were reduced 10 per cent on October 1, 1921, that the salaries paid them prior to October 1 would be reinstated as of January 1. Increased efficiency, they believe, will absorb the difference and in that way will not increase the cost of the Johns-Manville products.

The announcement was accompanied by this statement:

"This action has been taken in the belief that the tide of business conditions has changed, and is turning for the better. Even in the face of lower prices, it is our belief that salary increases at this time will stimulate personnel to harder work and more economical production and distribution and thus bring about a more speedy improvement of business."

Some City Houses that are small but well designed

THE
BUILDING
REVIEW

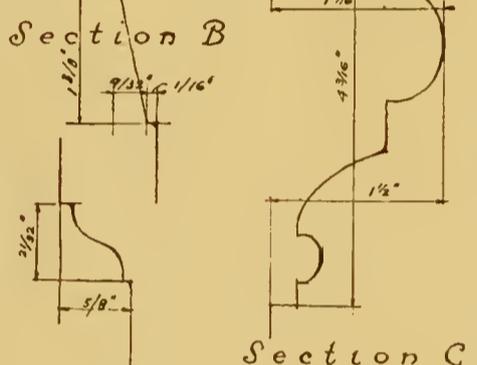
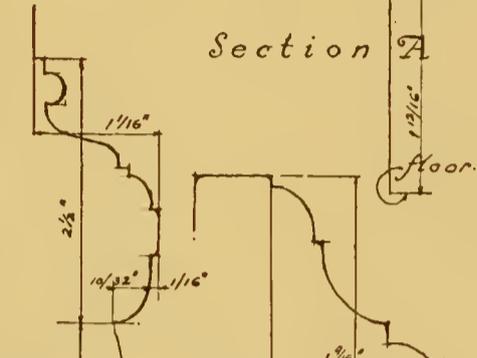
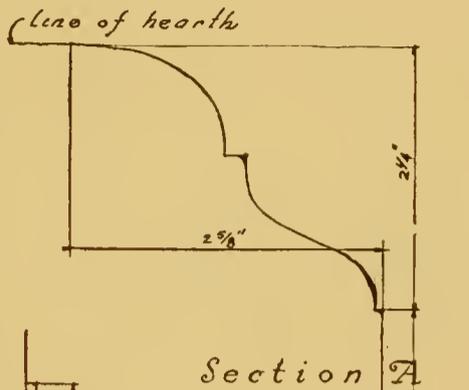


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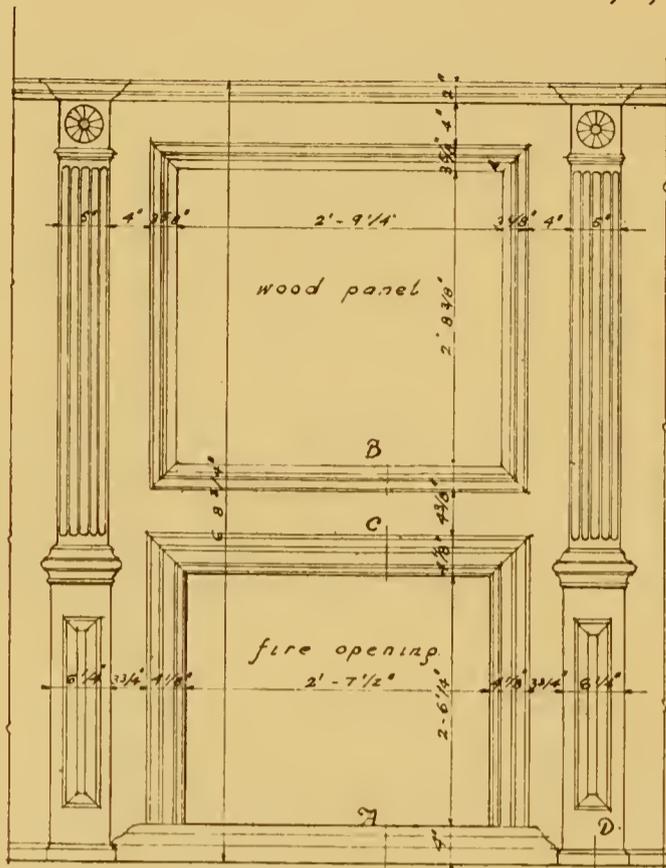
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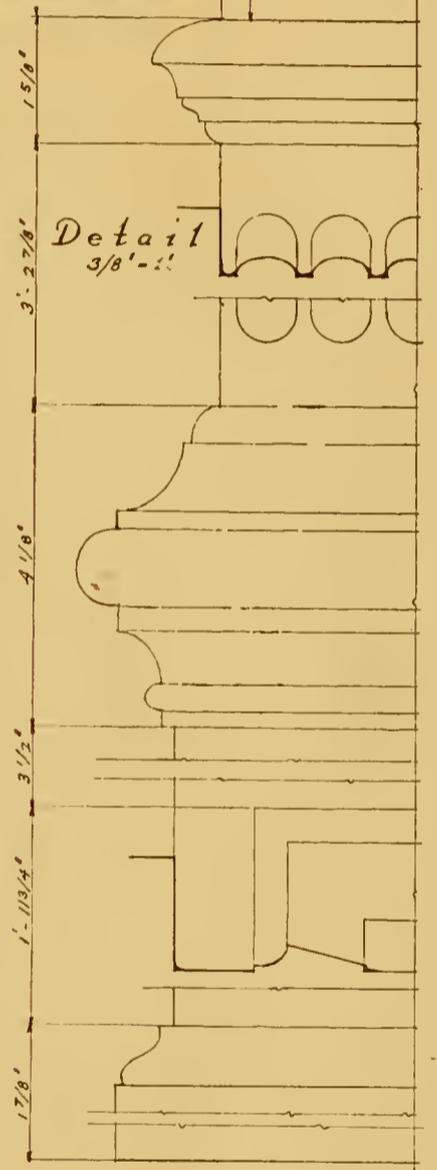
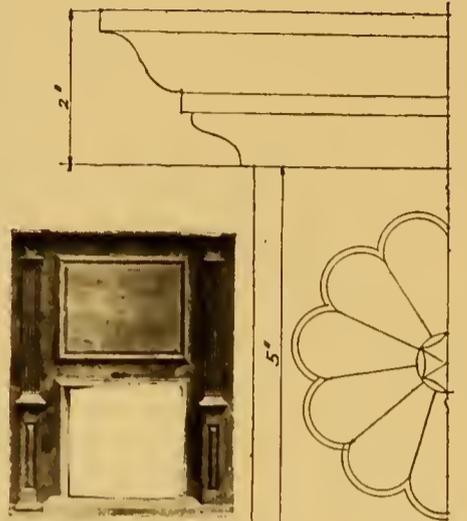
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Section D



Elevation
scale 1/2" = 1'-0"



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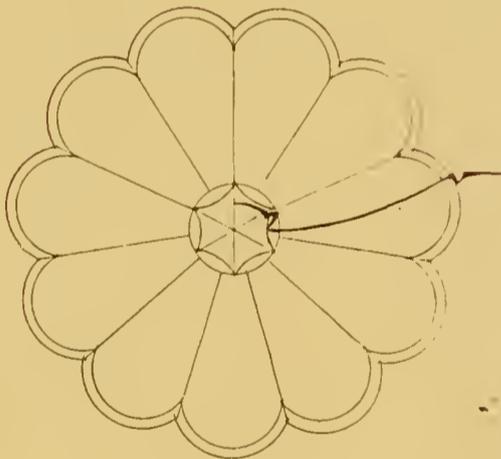
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THE BUILDING REVIEW

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San Francisco

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The Responsibility of Architects.

BEING an architect is a man-sized undertaking. It requires more training than many other professions. Every building you create is a monument to your success or failure.

Your work must be seen by the public, and by it you are judged. In the old days the erection of a structure was a relatively easy matter. Not so today. The modern architect must be an artist, engineer, estimator and executive combined.

No one man can excell in every one of these combined activities—he must leave details to others. He must know manufacturers on whose products he can rely on absolutely. These lists of manufacturers he must continually be reminded of—of the products they offer and the service they give.

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The BUILDING REVIEW

VOL. XXI.

SAN FRANCISCO, MARCH, 1922

No. 3



ENTRANCE DETAIL, SEA CLIFF

EARLE B. BERTZ, ARCHITECT

AN URBAN OASIS

By Harris Allen

It is a saddening and a discouraging experience to motor through the newer streets of the average large city, and observe the general type of small house.

One sees miles of commonplaces with hardly a single redeeming feature. Block after block presents a combination of clumsy "dry-goods boxes," with fantastic abortions whose wild vagaries of outline leave the famous "Cabinet of Dr. Caligari" far behind in the contest for supreme decadent distortion.

With what surprise and relief, then, does one come upon a block of simple, attractive houses, well designed and well built, blooming in the midst of the heterogeneous mass like a lily in the mud—an oasis in a desert!

A real estate firm which has the courage and intelligence to carry out such a project deserves the gratitude of the community. It is creditable, of course, to develop a fine residence tract, restricted and parked; these are distinct assets to a city. But their effect is necessarily limited. Here, on the other hand, is an object-lesson available to thousands. It is inevitable that recognition will come, gradually, of the contrast between the quiet good taste of this block and the garish vulgarity of its neighbors.

Mr. Bertz has had both a problem and an opportunity; he has solved one and seized the other. He had a free field and a free hand, with no existing buildings whose architectural treatment must be adopted or adapted, or else left as a jarring note. On the other

hand, there were certain economic conditions confronting him.

A standard unit plan was necessary, in order to lower the total cost and to establish a standard average selling price. To meet the general demand, each house must contain a garage.

The solution was a happy one. The standard plan was varied in one particular; half the houses were given an outside entrance with cement steps and landing, while the remainder have an "English basement entrance." In the latter case, the living room, extending across the full width of lot, was larger by the width of the outside steps.

This arrangement varied the wall line by its alternate break, and reduced the number of ground floor openings.

The architectural treatment of the house-fronts shows a well-studied scheme resulting in harmony without monotony. The general vista is quite suggestive of a charming English village street; an Italian spirit creeps in here and there without disturbance. There is a very effective silhouette resulting from the varying gables and eaves, which are placed with a nice sense of balance.



TYPICAL DINING ROOM, FOURTH AVE., AND FULTON TRACT, SAN FRANCISCO



TYPICAL LIVING ROOM, FOURTH AVE., AND FULTON TRACT, SAN FRANCISCO

The detail is simple and refined, and a distinctive individual character has been given to each house front. Generous use of color emphasizes the separate units; in some instances the palette is a bit exuberant, and the fading process will relieve a too vivid pink or orange (not necessarily the architect's fault; painters have been known to throw in some extra coloring matter for good measure). But on the whole the effect is very pleasing, especially in combination with tiled roof or window shutters; these broad splashes of gray or blue green are very effective against the rough stucco walls.

Eventually vines and shrubbery will add their touches of softness and grace; even now, the broad "parking" strips or green lawn are pleasant to the eye, besides ensuring more warmth and light to the houses. Trees have been set out; it needs no artist's perception to visualize a delightful picture of this block in a few years.

These little houses, with their simple dignity and good taste, do veritably constitute an oasis in a desert; for the good of the community, to preserve our faith in human appreciation, "May their tribe increase."

THE JONES TRADE ZONE BILL

By HENRY M. ROBINSON*

The Jones bill, as now amended, provides necessary machinery for the creation of foreign trade zones in, or adjacent to, American ports of entry, and authorizes the Secretary of Commerce to grant to states, municipalities and their legal subdivisions the privilege of establishing such zones. Uhereas, under the terms of the bill, both foreign and domestic merchandise may be brought into a free zone and there be broken up, assembled, mixed with foreign or domestic merchandise or otherwise manipulated for re-export, direct manufacturing, as such, may not be carried on within the proposed districts,—this in order to meet the wishes of interior communities and to allay their fears as to seaboard manufacturing competition.

Under the terms of this act, no duty is to be applied to merchandise delivered from ship to wharf within a free zone unless some part, or all, of it is taken out for domestic consumption, at which time it will pass through the Custom House and be subject to regular duty.

In other words, we may, within certain districts within our ports of entry, be a free trade nation and at the same time protect our own domestic markets from a flood of cheaply manufactured European and Asiatic goods.

It is axiomatic that, for the protection of the American manufacturer, a method must be provided for the maintenance of a merchant marine which will carry abroad the surplus of American manufactured goods; otherwise these goods must continue to back up upon our own markets and thereby reduce the earnings of our manufacturers, the profits of our merchants and the earnings of American labor itself.

There is appearing from time to time in certain publications the suggestion that most of our products are consumed at home and that only about one-seventh is available for export, and, hence, that our foreign trade is a relatively unimportant factor in our national prosperity.

Accepting these figures as true, economists generally agree that a surplus is the controlling factor. Is it not, therefore, reasonable to assume that it is the backing up our manufactured surplus and our inability to sell abroad that has brought about our unemployment situation?

Since the beginning, any nation that has

engaged, with any appreciable degree of success, in international commerce has been, on a free trade basis, or has maintained one or more free ports or free zones.

For years, however, we, as a nation, have maintained a high tariff, and most of the time a very high protective tariff, and, for half a century our flag has been a comparative rarity upon the seven seas.

Came the Great War, and demonstrated beyond cavil the need for the maintenance of a merchant fleet, if, in time of war, the nation is to be protected—and this, whether the war be military or economic.

Since the maintenance of a merchant fleet is obviously predicated on world trade, it is evident that a high protective tariff, world trade, the maintenance of a merchant fleet with the financial and commercial accompaniments of those operations, are inconsistent, but experiences of European nations show conclusively that a modification of this inconsistency can be brought about without definite injury to the principles involved in a protective tariff.

In fact, if the feeling continues to grow that we should engage in world trade and maintain a merchant fleet, as a necessary corollary, the principle of protection must, of necessity, be greatly modified, unless some method is devised that will permit a world trade of merchandise in and out of our important ports of entry without the delays and expense attendant on our present methods of operation.

It is true that under the present law imported merchandise may be impounded in bonded warehouses and withdrawn for transshipment, or may be impounded, withdrawn and manufactured in foreign trade with a drawback of the customs paid. This plan was intended to meet the needs of world trade, but is nearly inoperative and utterly fails of accomplishing the main purpose, in that the time consumed in vessel delays and in the unwinding of red-tape militates against such an operation.

If it be true that the cost of operation of our merchants ships is to be greater than that of the important competing nations, some method must be devised to balance that cost, and the greatest waste in the shipping business is loss of time in ports, due to the administration of complex laws and regulations—regulations, within the provinces of many different departments.

In other words, the elimination of port delays would be of tremendous economic ad-

(*President of the First National Bank of Los Angeles, and formerly Commissioner of the U. S. Shipping Board.)

vantage, for it is recognized that successful ship operation depends, to a great degree, on keeping the ship at sea.

A free zone would permit the prompt unloading of a ship within the boundaries of the zone without any of the long delays that grow out of the Custom regulations. If any part of the cargo is intended for domestic consumption, this merchandise will be passed from the zone through the Customs House instead of holding the ship until all the merchandise is checked and customs paid.

It is to be recognized that ships other than those under our flag will have the same advantage in our ports, but it is fair to assume that ships under our own flag, through a period of time, will touch more often at our ports than ships under other flags, and, to that extent, at least, there would be a factor for improvement in the cost of the operation of American vessels.

Another great advantage in the operation of our marine would be the fact that so-called "triangular voyages" could be made and cargoes moved to our ports, only a part of which would be intended for domestic consumption.

The problem of American ships has been that, while we have merchandise for export shipment, only too often it is necessary for the ships to return in ballast. The British, a free trade nation, on the other hand, until recently have been able to fill their unoccupied space in their outward bound ships with coal for foreign countries, and for bunkering, returning with cargoes of commodities from foreign countries—cargoes partly for home consumption and partly for transshipment to other countries—transshipments made without any regulatory practices that result in serious delays. This, too, because of free port zones, was equally true in the case of Germany before the war.

The establishment of free zones for America has been under discussion for many years. Shipping men, naturally, have been strongly in favor of it. They take the position that the principal advantage to the merchant bottoms ships is the ability to bring in full cargoes, or at least larger cargoes than present conditions allow, the bulk of which will be for the transshipment in American bottoms to other ports in connection with shipments of domestic merchandise.

Should the Jones Bill become a law, our protection principle will be conserved, because, otherwise, the belief that we should engage in foreign trade may, in the course of time, result in a marked modification of our

tariff laws, and this may not be necessary if we can maintain our foreign trade and our merchant marine through the medium of these free zones.

Originally the propaganda for foreign trade zones, free from Customs duty, was limited in its discussion to about three ports on the Atlantic Coast and one or two on the Pacific. The bill as presented, however, contemplates the possibility of the establishment of foreign trade zones in each of the important ports of entry. This is a great stride in the right direction, for, if all of this foreign transshipment were to be done in the ports of New York, Philadelphia and New Orleans, and in only one or two ports on the Pacific, the congestion of traffic to and from these ports would place an additional burden on rail terminals already overloaded, and would result in an uneconomic transportation with the back country of merchandise intended for domestic consumption.

In other words, a fairly general distribution of these free zones should be advantageous to the whole people and not of unfair profit to a limited number.

Another thing, it is only through the adoption of a free zone policy that the protectionist, the ship operator and the foreign trader can meet on common ground, and really all that the Jones bill is attempting to do is to carry out scientifically what we are now doing most unscientifically through our bonded warehouses.

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Beginning date, Friday, March 3rd. Room 266 Pacific Building, Fourth and Market Streets, San Francisco.

Applied Mechanics—7 p. m. Useful for draftsmen, designers, architects, and all who wish to make a thorough study of mechanical engineering. Subjects treated are: motion, force, work, energy, polygon of forces, fluid pressure, moments and centroids, moments of inertia, simple strains and stresses, beams and bending, deflection of beams, compound strains and stresses, columns, and stresses in framed structures.

Reinforced Concrete—8 p. m. Lectures and discussion of the applications of mechanics to concrete structures, including beams, columns, floors, etc. Among the topics are the following: bending moment and shear, resisting moment, fiber stresses, compound stresses, columns, comparison of wood and steel with reinforced concrete beams, properties of concrete, general theory of reinforced beams, derivation of formulas, T-beams, concrete columns, reference works.

Those taking this course should be familiar with the principles of mechanics, through the extension course in Applied Mechanics or equivalent study.

Each course consists of fifteen one-hour lessons, meeting Mondays and Fridays. Fee for each course, \$6.00.

Registrations for these courses are now being received at the San Francisco offices of University Extension, 264 Pacific Building and 140 Kearny Street.



THE CALIFORNIA GARDEN*

By A. M. WOODMAN

California has frequently been termed a country in itself, for probably no other country in the world possesses such a variety of climate, natural resources, and scenery, as does our state. The state abounds in native flora, and the world has been searched from end to end for new and interesting specimens of plant life. California, too, has been repeatedly eulogized by enthusiasts, who have occasionally overstepped bounds in describing the wonders of the state, claiming that it is the land of fruits and flowers, the latter blooming at our feet the year round. But most of us know that, although it is quite possible to grow a great variety of plants in luxurious fashion, still, because of semi-arid conditions it sometimes requires the utmost diligence to keep some forms growing, and up to their standards of growth.

What constitutes the California garden, as distinguished from the Eastern type of garden? There is a distinct charm about the old New England garden, full of trim little paths laid out in regular fashion, seats, trellises, arches, and arbors in set places, garden plots filled with old-fashioned, sweet-scented flowers, which is not difficult to feel. So is the beauty of the formal garden, so prevalent in the East, felt, with the garden set out in

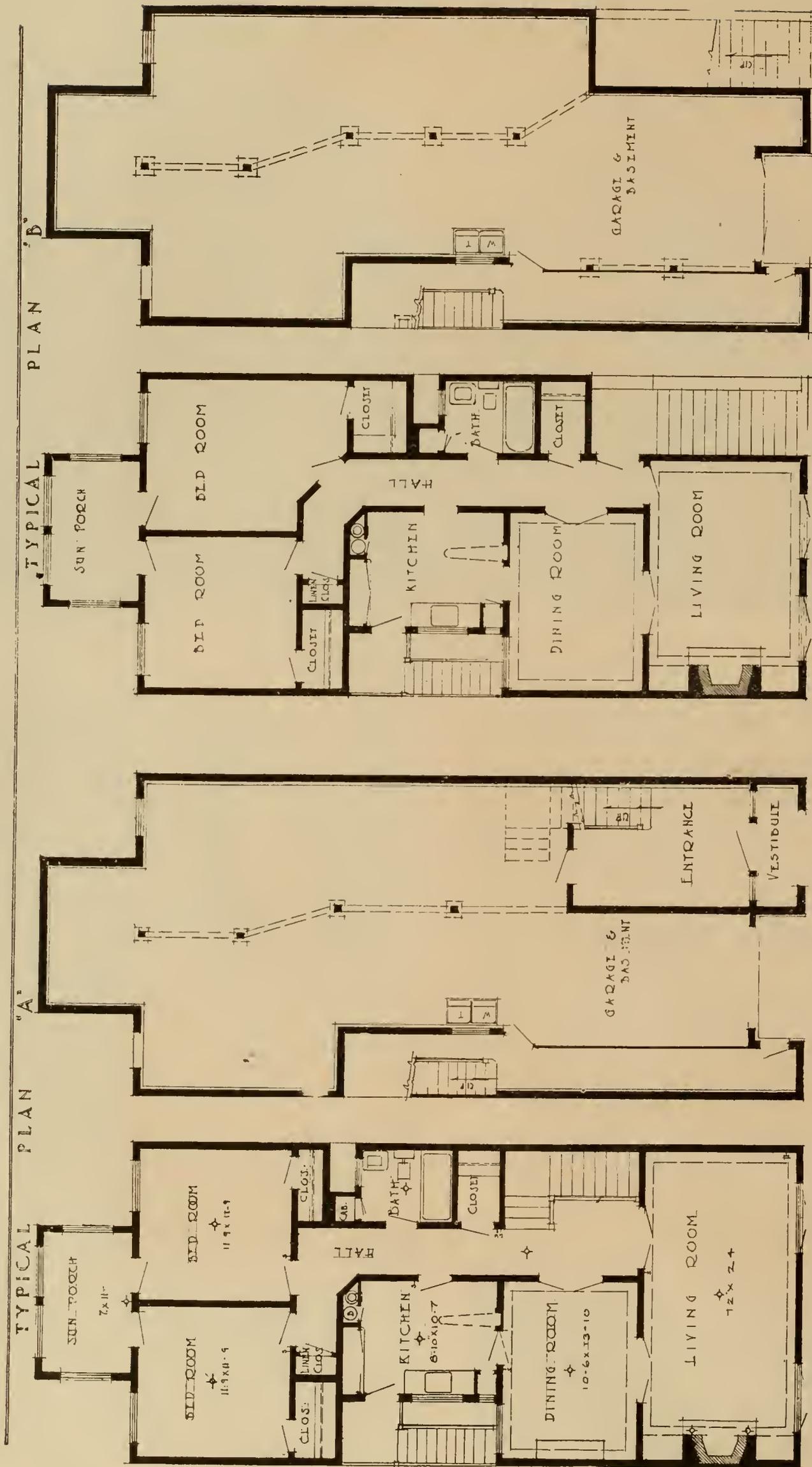
regular fashion, containing fountains, pools, pergolas, sun-dials, moss-filled stepping-stone or brick walls—the whole appearing to be but an extension of the house.

It is freedom from conventionality, rather than freedom from restraint, that characterizes true Californians. It is this spirit which is reflected in California gardens. In the extreme East the spirit which prevails is that of "you must do this and you mustn't do that; observe all of the properties; do not deviate an inch from the accepted line of traditional conduct." Here in the West we are tempted to go to the other extreme—to break entirely away from established precedent and custom. But there is an obvious danger in this attitude, which must be guarded against in matters of gardening.

In California, I believe, the trend is towards a distinct informality in most of our plantings. And yet, even in informality there must be some semblance of unity of purpose and conception—in fact, it is really much more difficult to form an informal than a formal setting. Sometimes the wisest procedure seems to be to strike a happy medium between the two—to include the best features of the formal garden, giving them an informal intimate setting. In other words, we remove the austerity of too formal a treat-

(Continued on page 33)

*A paper written for the Garden Club of Alameda County.



BASEMENT.
EARLE B. BERTZ, ARCHITECT

FIRST FLOOR.

TYPE PLANS A AND B, FOURTH AVENUE AND FULTON STREET TRACT, SAN FRANCISCO



HOUSES IN FOURTH AVENUE FULTON STREET TRACT, SAN FRANCISCO, CALIF.

EARLE B. BERTZ, ARCHITECT
Photographed by F. M. Fraley



HOUSES IN FOURTH AVENUE FULTON STREET TRACT, SAN FRANCISCO, CALIF.

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HOUSES IN FOURTH AVENUE FULTON STREET TRACT, SAN FRANCISCO, CALIF.

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HOUSES IN FOURTH AVENUE FULTON STREET TRACT, SAN FRANCISCO, CALIF.

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Photographed by F. M. Fraley



HOUSES IN FOURTH AVENUE FULTON STREET TRACT, SAN FRANCISCO, CALIF.

EARLE B. BERTZ, ARCHITECT
Photographed by F. M. Fraley



HOUSES IN SEACLIFF, SAN FRANCISCO, CALIF.

EARLE B. BERTZ, ARCHITECT
Photographed by F. M. Fraley



HOUSES IN SEACLIFF, SAN FRANCISCO, CALIF.

EARLE B. BERTZ, ARCHITECT
Photographed by F. M. Fraley



DETAIL OF ENTRANCE TO MR. JOHN BRICKELL'S RESIDENCE,
SEACLIFF, SAN FRANCISCO, CALIF.

EARLE B. BERTZ, ARCHITECT
Photographed by F. M. Fraley

ment by adding a touch here and there of informality.

All this pertains to gardens, adjuncts to residences informal in character. Gardens immediately adjoining residences of classic design, naturally would conform in its lines and general scale to those of the residences, or else the classic beauty of the latter would be vitiated or lost. A gradual transition could then be effected from the formal to the more informal parts of the grounds. It is this lack of feeling for the proper relation of house and garden, that, in many instances, has practically destroyed any sense of harmony between the two.

What are the preliminary steps to be taken before laying out a garden? First, a careful survey of the site is necessary—taking note of all existing features; as, the general contour or lay of the land; any abnormal depressions or mounds; the presence of streams, native trees, rocks. Then a rough draft of the site should be made, preferably showing various contours and levels.

The prospective position of the house can be determined, if not already in place, so as to give the best possible views from the house, and to bring it into close and intimate relation with the surrounding property. Then, if the size of the estate permits, such features as pergolas, tennis courts, swimming pools, etc., may be added.

The size of the estate does not necessary prohibit making it as artistic, or more so, than one of wider expanse. The cameo, though of diminutive size, may contain as much detail as the large painting. Given a bare piece of ground of any dimensions, it is possible by clever artifices of plantings and placement of walks and vistas to so deceive the eye, as to make the estate appear several times larger than it really is.

The garden at all times should be considered but an extension of the house. This point is frequently neglected; we think of the garden as being a distinct entity, instead of being directly related to the house. And yet this is a grievous mistake to make. The house should be so designed as to make it a comparatively easy matter to lay out the grounds.

Let us take a position near the center bay window of the living room and picture to our mind's eye the best possible arrangement of lawn, shrubs, flowers, garden plots, pools, garden seats, pergolas, perhaps a sundial. Draw an imaginary line to some central feature—say a lily pond—and let everything else be in relation to that particular feature. How refreshing it is to be able to view a



landscape, preserving harmonious lines and some degree of order, rather than to witness a miscellaneous hodge-podge of unrelated parts!

Thus in fact we are but stepping from one living room into another, although the accouterments of the garden room consist mostly of living forms of trees, shrubs, grass, and flowers, with garden ornaments added to give a feeling of permanence, and to add to a background.

As we approach other parts of the grounds, a more liberal treatment of the landscape can be employed. If the size of the estate warrants it, charming vistas may be provided, affording, through correct placement of trees and shrubs, the most interesting views of the Bay and surrounding territory. The different features of the estate may be reached through adequate approaches; an arch here and there; some obstacle, such as sun-dial or crystal-gazing-globe, placed in the middle of the path; a seat placed in a convenient spot, affording rest or pleasant views of the garden; a pergola leading from the house to a particular feature (which is its true mission), or acting as an ornamental adjunct of some garden scheme; a rose-covered summer-house in which to while away the sultry hours of the day (providing, of course, if we really have them); a pool of water to display water-loving plants, and to reflect the forms and foliage of trees, and colors of flowers and the sky; a little faun or satyr, half hidden in shrubbery, suggestive of the woodland; a fountain to supply the sound of running water, and to furnish beauty of architectural ornament. The interior court, called the patio, peculiar to houses of Spanish, Mexican or Mission design, affords the means of securing seclusion, and of including many of these features; it should be employed more often in California. (To be continued)

A. I. A.

SAN FRANCISCO CHAPTER

Officers

Geo. A. Applegarth, President; Ernest A. Coxhead, Vice-President; J. Stewart Fairweather, Secretary.

Directors

Henry H. Meyers, three years; Harris C. Allen, three years; S. Schnaittacher, two years; Morris M. Bruce, two years; John Reid, Jr., one year; Geo. W. Kelham, one year.

Committees Appointed for the Year 1922

Practice—S. Schnaittacher, Chairman; G. W. Kelham, E. A. Coxhead, Geo. A. Applegarth.

Education—E. Coxhead, Chairman; J. Bakewell.

Competition—S. Schnaittacher, Chairman; William Mooser, G. A. Applegarth.

Coast Chapter—J. S. Fairweather.

Legislation, Building Laws, Engineers' Council, Contractors and Zoning—Henry H. Meyers, Chairman; William Mooser, Albert Schroepfer, Fred Meyer, Geo. A. Applegarth, S. Schnaittacher.

Public Information—Harris Allen, Chairman.

Membership—W. B. Faville, Chairman; E. Coxhead, A. G. Headman.

Special subjects for discussion, or speakers at Chapter Meetings—P. Meyer, Chairman.

Chapter Dinners—M. Bruce, Chairman; Smith O'Brien, A. G. Headman.

B-B Campaign—Fred Meyer, Chairman; S. Schnaittacher, Henry H. Meyers.

Industrial Association Membership—Clarence Ward, Chairman; Fred Meyer, Arthur Brown.

March 16th, 1922

The Regular Meeting of the San Francisco Chapter of the American Institute of Architects was held in the rooms of the San Francisco Architectural Club, 77 O'Farrell Street, on Thursday evening, March 16th, 1922. The meeting was called to order by President Geo. A. Applegarth.

The following members were present: B. S. Hayne, John Norberg, Wm. A. Newman, E. B. Bertz, Morris M. Bruce, W. B. Faville, S. Schnaittacher, J. J. Donovan, Harris Allen, A. J. Evers, Chester Miller, John Bakewell, Arthur Brown, Fred Meyer, E. A. Coxhead, G. A. Applegarth, L. C. Mullgardt, John A. Baur, W. R. Yelland, Chas. P. Weeks, E. H. Hilderbrand, J. S. Fairweather.

Minutes

The minutes of the previous meeting held February 16th, 1922, were read and approved.

During the dinner hour the President introduced Mr. Runyon and Mr. T. Simpson of the Great Western Power Company, who gave an interesting talk on the use and coming use of electric power.

New Business

A letter from Mr. Edward Glass in explanation to an unauthorized article in the Chronicle was read and placed on file.

Next order of business was the election of delegates to the Chicago Convention of the American Institute of Architects, and the following ballot resulted:

Arthur Brown, 14; Henry Meyers, 12; John Bakewell, 11; Fred Meyer, 8; Wm. Mooser, 7; E. Coxhead, 7; Geo. A. Ferris, 4; F. J. Delongchamps, 1.

The first four were elected to go, and the recount of the tie for fifth place Mr. E. A. Coxhead won.

It was then moved and carried that there be no alternate delegates elected and if any of the above drop out they turn over their proxies to the members going.

Mr. L. C. Mullgardt, of Honolulu, who was at the meeting, gave a talk on conditions in the Islands.

Adjournment

There being no further business the meetings adjourned.

Respectfully submitted,

J. S. FAIRWEATHER, Secretary.

The regular meeting of the San Francisco Chapter of the American Institute of Architects was held on Thursday evening, February 16th, in the Architectural Club Rooms, 77 O'Farrell Street. The meeting was called to order by President George A. Applegarth.

The following were present: Morris Bruce, G. A. Applegarth, B. S. Hayne, S. Schnaittacher, J. S. Fairweather, Harris Allen, H. E. Burnett, E. B. Hurt, Col. Wood, W. J. Wilkinson.

Minutes

Minutes of the meeting held on January 19th, 1922, were read and approved.

Committee

The committee on competitions reported that the competition for the Honolulu Memorial Building was approved.

New Business

The Secretary reported that Mr J. J. Donovan's book on "School Architecture," and also the "Small House" book were added to the Club's Library.

It was moved and carried that the Chair appoint a committee to look into the Small House movement.

A communication in regard to restricted delegates to convention was read and placed on file. San Francisco Chapter is at present allowed six delegates.

Adjournment

There being no further business the meeting adjourned.

J. S. FAIRWEATHER, Secretary.

WASHINGTON STATE CHAPTER

February Meeting

The members welcomed the newly elected President, Carl Gould, to the chair.

Reports were heard upon the progress of organizing a Congress of Building Industries in Seattle, from Mr. Huntington, the temporary chairman of the organization, and from the Small House Committee on how the emergency in Oregon was being met. Some discussion was had in connection with the proposed war memorial in Seattle.

A report was made by the special committee on school buildings, at the request of Mrs. Josephine Preston, State Superintendent of Schools, that the Chapter advise with the State Superintendent of Education with reference to school buildings throughout the State. Following is a summary of their recommendations: (1) The Chapter to institute a competition amongst members for one and two room school buildings; (2) Working drawings of the above to be sold; (3) List of Chapter members to be distributed throughout the state to the County Superintendents. The selection of architects for school buildings to be made from these lists. (4) That the Chapter form a special committee to criticise school plans as such inspection is now required by law and requested of the Chapter by Mrs. Preston.

Following the business session a series of about fifty lantern slides were shown which had been obtained by the President on his recent Eastern trip. The pictures elicited much interesting comment and it is hoped that the Chapter may have many more such enjoyable evenings.

EDITORIAL



HOUSE AT FOURTH AVENUE AND FULTON ST.,
SAN FRANCISCO

If there is a human being in this country who does not realize that now is the time to build, it is because that person cannot read, or has lost mind or eye-sight. Beginning soon after the Armistice, the papers and the magazines and the bill-boards have proclaimed loudly and repeatedly "Own Your Home!" "Build or Buy Now!" "Be Your Own Landlord!" or "Pay Taxes Instead of Rent!"

The construction industry has gone cheerfully (or gloomily) on, following the usual barometer of business conditions. Building is a matter of cold cash, after all, and money is too coy to be tempted away from shelter by the honeyed words of the press. Yet we all retain something of the credulity of children, and after a thing has been repeated often, there will be plenty of people who believe it is so.

Whatever the psychology or the reasons, the fact stands out now too clearly to be doubted; construction, joining or leading the trend of general business, shows an unmistakable activity and increase. The song of the rivet is heard on the hill, the hammer has been put to its legitimate use again, and

the heart of the dealer is happy once more; providing it be admitted that he possess such an organ.

Whereupon the Era of the Exposition springs into being with fresh missionary enthusiasm. Every Auditorium is to have an Exposition all its own; Model Home Expositions, Garden, Electric Expositions are upon us.

And why not? At the least, some money has been put into circulation, some energy created, some interest aroused. It may be too much to hope for, that the public appreciation of aesthetic merit should increase noticeably; but a glimpse of the tremendous complication of modern building, the bewildering varieties of devices and materials and attachments, may well impress upon the public that expert advice is desirable. And there is need of such conviction. Many a man who would not dream of prescribing for his own illness, or of trying his own case, will innocently assume the manifold responsibilities of building operations. Miles of our streets eloquently tell the tale.

And so we say, Success to the Expositions! May their doors be crowded!

INDUSTRIAL

PACIFIC COAST MARKET OFFERS GLASS MANUFACTURING INDUSTRY AN ATTRACTIVE FIELD IN WHICH LOCAL CAPITALISTS WILL SOON BE ACTIVE

No great, lasting prosperity will ever come to the Pacific Coast until we begin to make for ourselves—here—many of the manufactured products with which the East is now providing us. We've told the world for years about the wonderful climate we have for working. But it doesn't mean anything unless we take advantage of it.

San Francisco was given a demonstration during the war of the value to a community of great industrial payrolls. The activity in the shipyards when shipbuilding here gave steady employment to 50,000 men and the prosperity of the retail merchants of the bay district, were closely related. The magnitude of the shipyard payrolls was directly reflected in the hectic prosperity of the big dry goods stores and other institutions whose success depends on popular demand for luxuries and necessities and the ability to pay for them.

There we had a practical illustration of a condition which can be made permanent by the establishment on the Pacific Coast of plants to manufacture even a few of the products which the East is making for us and on which the East takes the full manufacturer's profit.

In looking over the field in which the readers of this magazine are particularly interested—the building industry—one cannot help being impressed by the fact that comparatively little of the manufactured material which goes into construction work is made on the Pacific Coast.

A complete survey of the manufactured products shipped from the East to the Pacific slope during one normal year would, without a doubt, reveal many opportunities for manufacturing enterprises on this coast. The railroads, for reasons of their own, guard this information most jealously, in spite of the fact that the establishment here of more large manufacturing plants would in the end benefit transportation enterprise more, perhaps, than any other activity.

It required no survey, however, to learn that practically all the window glass used on the Pacific Coast is manufactured in the East.

In an effort to find out something about the Pacific Coast's annual glass bill the Building Review sent out a questionnaire to the principal cities of the Pacific Coast asking for the record of 1921 building activity segregated as follows: Office Buildings, Hotels, Store Buildings, Apartment Houses, Residences, other buildings.

This segregation was based on a preliminary survey made to ascertain the percentage of building cost that goes for glass. The percentage varies with the class of building and the questionnaire was classified according to these variations.

While the response to our questionnaire didn't give us anything like a complete record of 1921 building activity, it gave us enough to suggest that the glass manufacturer would find this side of the continent a profitable field for investment.

Here is what our information showed. Out of building construction in 1921 amounting to more than \$180,000,000, there was spent for glass alone practically \$7,000,000.

Our questionnaire covered the principal cities of California and Seattle, Tacoma and Portland, outside the state. The activity in 1921 was hardly normal. The record will probably be more than doubled in 1922 and is not likely to run as low again for many years.

For the comfort of architects and owners to whom the high price of glass has been one of the stumbling blocks in the way of promoting or undertaking new work, we are able to say that local capitalists, able to finance any venture they might undertake, are well advanced in a plan for the manufacture of glass of all kinds on the Pacific Coast.

This much we can say at this time: There

(Concluded on page 40)

100 PER CENT ELATERITE

HOW NATURE HAS PRODUCED A MATERIAL WHICH
USED UNADULTERATED WITHSTANDS THE
ACTIONS OF ACIDS—ALKALI AND
TEMPERATURE CHANGES

The mountainous region called Uinta Basin in the state of Utah is remarkable for its deposits of Hydro-Carbons and Natural Bitumens, some of which by reason of peculiar geological conditions in past ages had been metamorphosed into new and distinct substances found nowhere else. Among these ores first discovered in 1885 were Gilsonite, Asphaltum and Elaterite. Although having a common origin and having to some extent a similar appearance, they are entirely different in other respects.

Gilsonite, while remaining an asphaltum, was solidified and endowed with a higher fusing point than any other natural asphaltum. It is found in veins as much as 20 feet thick, is easily mined, readily fusible and melts below 300 degrees Fahrenheit. It is soluble in the usual solvents and used in the manufacture of paints and valuable for this purpose.

Elaterite is classed with the Pyro-Bitumens, as it is infusible, insoluble, not yielding to any known solvent. It is found in *vertical veins*, varying in width from 6 to 30 inches. To become usable the ore must be subjected to heat in specially constructed retorts or stills at from 700 to 800 degrees Fahrenheit, volatile oils extracted, undergoing what is known as depolymerization, that is breaking down the complex groups of molecules into simple ones.

Structurally, the two ores are different, the molecules of Gilsonite being globular, while those of Elaterite elongated, the length being three or four times greater than the width. It is to this peculiar form of molecules that Elaterite owes its remarkable elasticity and toughness, cutting like whalebone, the shaving being elastic. This of course is not true of Gilsonite, which is characteristic as it is all hardened asphaltum by brittleness. This feature marks a radical difference, the importance of which is very apparent in material used to withstand hard usage and exposure as is the case with Floorings, Waterproofings and Preservatives. Vegetable oils and fats of various kind are added to Gilsonite in order to supply elasticity and tensile strength, and rosin or similar substances to

give it hardness, not one of which could be used however without detracting as much value from the durability of the material as the added hardness gives. Elaterite has all these elements so necessary for materials for such uses as flooring and waterproofing in its own gum to a higher degree than could be reached by the use of anything that could be added and it is used entirely unadulterated, 100 per cent.

Used as Waterproofing, Elaterite Gum held in solution by a substance which quickly evaporates, leaves a film of pure mineral rubber. The liquid penetrates the pores of the construction work and becomes a tangible, inseparable part of anything to which it is applied. The seal thus formed becomes a tough, elastic shield, which is absolutely unaffected by water, dampness, acids or alkalies. As a bond for plaster and concrete, Elaterite has no equal, and it will readily take paint and will not stain through. Laboratory tests have shown this material to be unaffected by the following acids: Fifty per cent solutions of Nitric, Hydrochloric, Sulphuric and Caustic Acids. Burnt Lime allowed to slack in a dish covered with Elaterite had no effect on it.

Used as Flooring,—An eastern concern, which for some years had been using Elaterite in the manufacture of Waterproofing, found that Elaterite Gum, scientifically mixed with Asbestos and other mineral aggregates, produced a flooring material which had astonishing wearing quality, combined with resiliency, waterproofing and sanitary qualities. It was soon recognized by architects and users as the floor surfacing so long desired in place of stone hard cement floors and the less resilient types of composition floors containing magnesite. It also in many places proved its superiority over the thick Asphalt Mastic Floorings. Gradually it found its way into all types of buildings until it is now used in place of linoleum in schools, hospitals, naval training stations, theaters, office buildings, factories and a great number of other private and public buildings. Although in most cases as little

(Concluded on page 40)

BUILDERS' EXCHANGE ANNUAL BANQUET

An affair that will hold special interest for all engaged in the building industry and general interest for the community at large, will be the annual banquet of the Builders' Exchange to be held April 19 at the Palace Hotel.

This banquet, according to officers of the exchange, will be more than the get-together social evening of the organization. Lavish plans have been made for entertainment, and as a banquet the affair is going to be a success if some of the best fun organizers in San Francisco build according to the plans that have been laid down. It is going to be more than a banquet, however.

The builders are already the busiest men in San Francisco and they are going to be busier before the year is much older. One of the important features of the banquet—it will come ahead of the fun—will be a discussion of some of the plans that have been made by the building industry to help San Francisco break all construction records in 1922.

The committees in charge of the banquet are:

Publicity Committee—Clarence F. Pratt, Chairman; R. B. Cleghorn, Thomas Price, John H. Sears, A. Fred Lindgren.

Sales Committee—Charles M. Cadman, Chairman; H. D. Poitras, George Dixon, Emil Hogberg, Jas. H. Pinkerton, Frank Mecklenberg, A. D. Coleman, E. T. Thurston, Arthur Elkins, Robert Cleghorn, Steve Guerin, Chris Berg.

Music and Entertainment—Joseph B. Keenan, Chairman; Alex Mennie, Charles Gunn, Charles Adams, Herman Lawson.

Reception Committee—Alfred Swinerton, Chairman; George Forderer, Atholl McBean, Wm. C. Duncan, C. U. Carle, George Wagner, P. A. Palmer, Felix Kahn, J. A. Plunkett, C. J. Hillard, J. E. Gwynn. There will also be a representative from each craft on the reception committee.

FURNACE THAT VENTILATES

W. A. Andrews, formerly with the Kleiber Truck Company of San Francisco, has been appointed sales manager for the Bockmann-Rusch Hardware Company, distributors for the Homer Pipeless Furnace. This heating system occupies less than five feet of floor space, and is adjustable to any height

of basement from six feet up. A patented inner lining keeps the outside of the furnace cool at all times and directs the heat waves through floor vents to the rooms to be heated. No heat is wasted on an unused basement.

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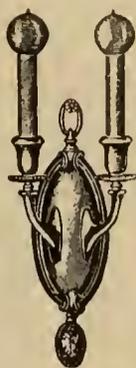
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LUMBER AND MILLWORK

MAKES OPEN FIREPLACE POSSIBLE ANYWHERE

Here is an invention that the camera can't tell you very much about. This because photography, intense as has been its development, is still limited in its scope when it comes to portraying elements like cheerfulness.

This invention, recently placed on the local market under the trade name of "Magicoal," is of special interest to architects who are building new homes, club houses and hotels or remodeling old ones. It takes the place of the open fire without any of the disadvantages that form part of the price we must pay for this old fashioned comfort.

"Magicoal," as its name implies, is a coal made magic by electricity, which makes it possible so perfectly to imitate a flaming and red hot coal fire that people sitting immediately in front of a grate filled with these electrically inspired coals could never tell that it was not the real black diamonds. It can be lighted by turning on a switch and extinguished just as readily.

It can be used to furnish an imitation fire without giving off any heat or it can combine with its cheerful glow just as much heat as is necessary to make the room comfortable.

This new invention makes it possible to provide any room with an open fire regardless of whether or not there is a flue. There is no dust, no dirt, no objectionable fumes—not even heat unless you want it.

The first basket of these magic coals was demonstrated in action the other day to the directors of the Pacific Gas & Electric Company and can now be seen by architects at 589 Howard Street. It is something new, but you must see it to know how effective it is.

GLASS BRICKS FROM BROKEN BOTTLES

Glass bricks are being made in France by the Garchey process, a patented procedure, by the Garchey Glass Brick Company (Societe Anonyme de Perre de Verre Garchey). The company was founded in 1900 with a capital of \$115,800, prospered very

well and has developed into one of the most prominent concerns in this line of glass manufacturing. Factories at Toulouse, Lyon, Creil, and Demi-Lune are almost entirely devoted to the making of glass bricks.

ELATERITE

(Concluded from page 37)

as from one-eighth to three-sixteenths of an inch in thickness, its wonderful toughness and flexibility made this floor adaptable in places where others had failed, as it is unaffected by temperature changes and will not crack or peel. For decking on flat roofs used for porches it is also used to great advantage over other materials.

The Insulite Chemical Company of Aurora, Illinois, are the discoverers of the adaptability of Elaterite for Floorings and Waterproofing, and have for the past twelve years extended their operations, so that their products are becoming generally known throughout the United States and Canada. Recently they have opened a branch office for the Pacific Coast in San Francisco, and intend to follow up with facilities for manufacturing as soon as their materials become generally known.

GLASS MANUFACTURING

(Concluded from page 36)

is in California an inexhaustible supply of sand suitable in its natural state for many kinds of glass making. This sand in its natural state is combined with certain substances which have prevented its use in the manufacture of window glass. A way has been found to get rid of these deleterious intruders, and, in the opinion of practical chemists and engineers, the method is efficient and commercially practicable.

In an early issue of the Building Review we expect to give the details of the interesting experiments that led this group of industry builders to believe that we could keep a large part of our annual glass bill at home. With these details will be the announcement that the Pacific Coast has established a plant for the manufacture of all kinds of glass and that one more step has been taken towards making this the industrial hive it should be.

Modern Tendencies in Apartment Houses

THE
BUILDING
REVIEW



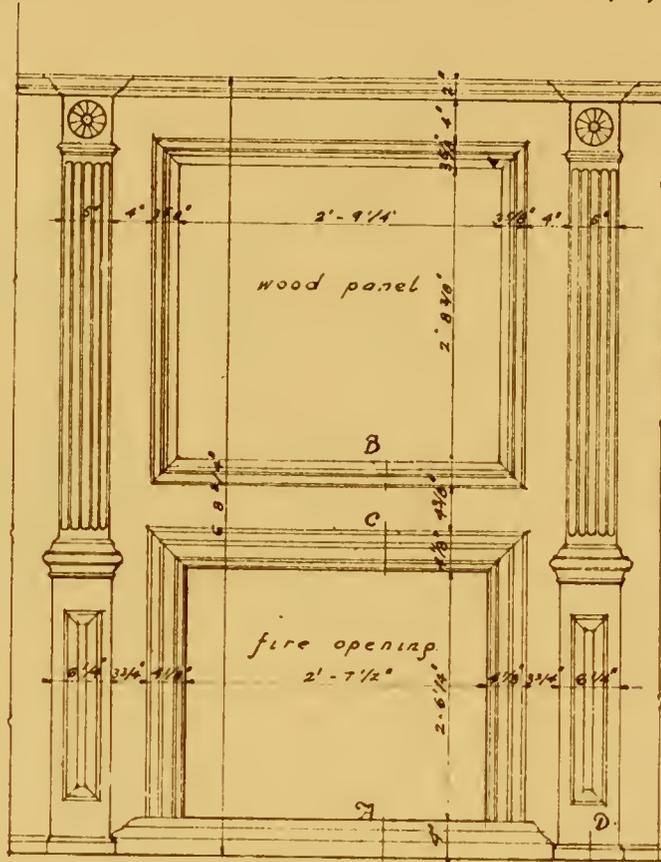
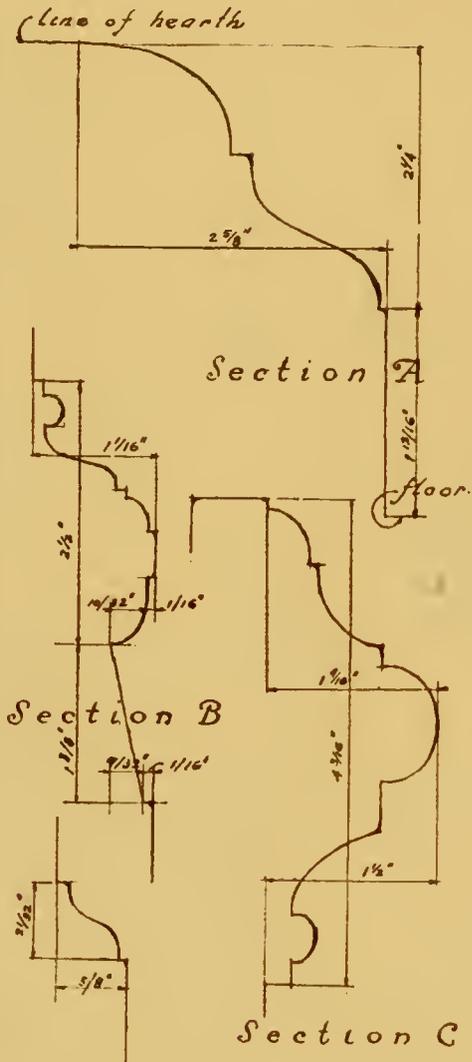
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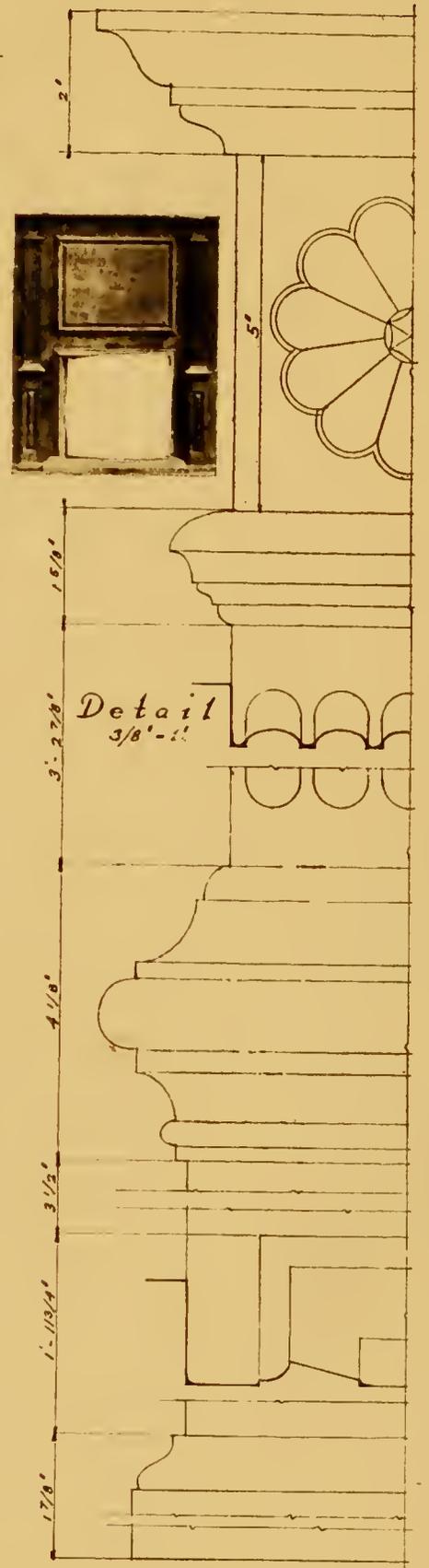
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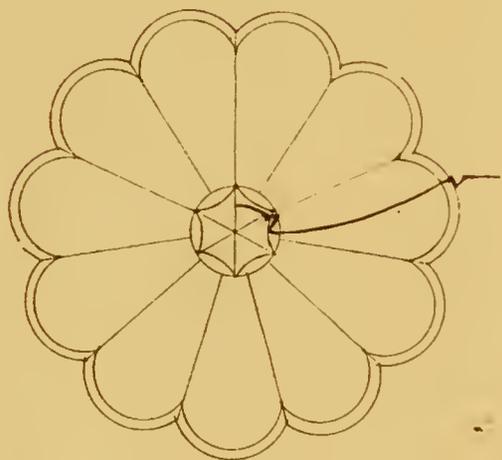
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THE BUILDING REVIEW

VOL. XXI. APRIL-MAY, 1922 No. 4-5.

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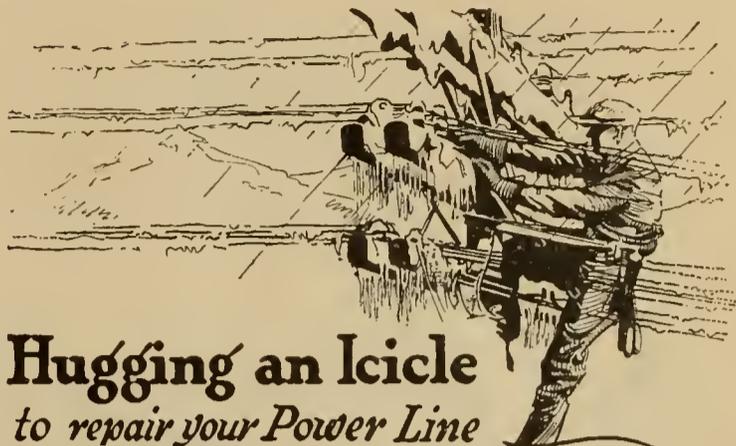
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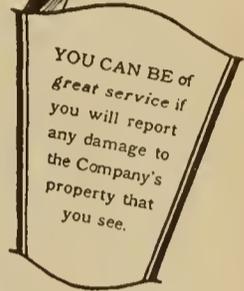
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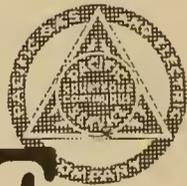
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The BUILDING REVIEW

VOL. XXI.

SAN FRANCISCO, APRIL-MAY, 1922

Nos. 4-5.



CAVARLY COURT APARTMENTS, OAKLAND, CALIFORNIA

SCHIRMER AND BUGBEE, ARCHITECTS

A PLACE TO LIVE

By HARRIS ALLEN

Since a great proportion of the dwellers in a modern city must be cave dwellers, one would expect the caves to be made as attractive, as home-like, as possible. No doubt the housing shortage is largely responsible for the prevalence of cheap, jail-like boxes which disfigure our streets; any shelter will do in time of storm; so why waste money on convenience and beauty, in short, on good design, when there is a waiting list at every door?

Some few multiple dwellings, however, have been built during these years of congestion, in the design of which some study is apparent, some of the elements of a home appear. It is safe to predict that as the shortage is reduced, such buildings will continue to be occupied while vacancies increase in those less attractive.

The group of apartment houses illustrated

herewith does not, of course, constitute all of any merit in the San Francisco bay region. It does represent considerable effort and time spent in the attempt to find a group of varying types of recently built apartments which possess sufficient merit to justify their publication. In selecting them, the process of elimination cut out all those loaded with bad ornament (the tin-man's delight) and the hopelessly crude and commonplace. Apparently it is not so easy to achieve both simplicity and interest—much as a severely plain gown, so we are told, is costlier than a be-ruffled one.

The San Francisco examples are naturally more formal and conventional than the suburban types. They are dignified and well proportioned, with sufficient wall surface to convey the sense of security that a dwelling should have, and with good fenestration.



STATEN COURT APARTMENTS
OAKLAND, CALIFORNIA

SCHIRMER AND BUGBEE,
ARCHITECTS

The Savage apartment utilizes the open-court plan to advantage, its projecting stair bays helping to retire the main court. The Summit Apartment, 2222 Hyde Street, on Russian Hill, frankly adapts itself to the site and its main rooms to the marvelous view from the rear. With one apartment to the floor, containing five bed rooms and four baths, the "California" type of *multum in parvo* has been disregarded here. But this is the exception, for the convenience of turning living room into bed room by the aid of wall-bed and dressing closet, appeals strongly to the cave dweller; it economizes time, space and labor.

The little Mitchell apartment, on Clay Street, has an individuality; it is refined, with a touch of elegance in its group of Frenchy balconies, their pattern picked out in gilt. The cornice is somewhat thin for the vigorous basement; but the balustraded panels carry up the composition well, so that the general mass and proportion is satisfying.

East of the bay, together with a more generally informal treatment we find a decided Italian feeling. These attractive villas at the head of Lake Merritt—how pleasing

they are with their terraces and fountains, their lawns and shrubbery!

All of the buildings shown here are well designed, with generous wall spaces and banks of many-paned casements, often opening to an effective iron balcony; the arrangement is usually compact and convenient, avoiding long halls or cramped quarters.

The Palazzo and Broadway apartments are more formal in treatment; being on busy streets, the living quarters are confined to upper stories. They are well executed in mass, detail and plan.

Staten Court deserves special mention. Although simple, and symmetrical, it avoids stiffness. A vigorous composition, it has delicacy of detail which still is not out of scale. It possesses dignity and graciousness—in fact, it is a very skilful and successful piece of work from an architectural standpoint.

The group here shown does not include any of what are known as "Community" apartments. As this strikes a new note in the urban housing problem, and there are some very interesting examples built or building in San Francisco, a separate article in a later issue will be devoted to that subject.



THE U. C. COLLEGE OF AGRICULTURE BRANCH AT DAVIS, CALIFORNIA

The new Campus Plan which is to govern the future growth of the Branch of the College of Agriculture at Davis and which has been adopted by the Board of Regents as the official plan for that institution, has just been completed by Professor John William Gregg, Landscape Architect, and is now on display in the Director's office at Davis, where it is attracting a great deal of attention and receiving much favorable comment from all who are interested in the development of a greater institution for Agricultural Instruction and Research.

The plan itself is approximately five by seven feet in size and beautifully rendered in color to bring out the details of the main scheme, which shows a practical but æsthetic grouping of buildings around a large central quadrangle which is balanced on Second Street of the town of Davis as a secondary axis, and with a broad main roadway from the State Highway on the north determining the main axis.

The detailed arrangement of buildings is such as to eventually form group units with secondary quadrangles which are called for by the style of architecture which is to prevail, and which is being worked out by William C. Hays, architect, of San Francisco.

Such utilitarian factors as convenience, accessibility, centralization of special and general types of instruction and research, comfort, and health have all been considered of prime importance in the study and preparation of the plan, which as it develops will gain great architectural and landscape beauty.

Already two new buildings, the Dairy Industries Building and the Horticultural Building, are being erected according to this plan, and new sidewalks, curbs and roads are now under construction along the new lines, with the result that the plan is already beginning to show definite results and furnish a visible suggestion of the future institution.



THE CALIFORNIA GARDEN

By A. M. WOODMAN

(Continued From the March Issue of The Building Review)

Fortunately in California we try to present our best front to the public, but I believe it is in good taste to supply some sort of hedge or wall about the place, to give some degree of seclusion. At least the grounds in the rear of an estate should be of a more or less intimate nature to permit the fullest possible enjoyment of them. For, to fully appreciate a garden, one must get out of contact with the outside world. A too stern formality will prohibit this feeling of intimacy with the garden, so that part of the garden frequented the most should be designed with a regard for the feelings and wishes of the owner. The treatment of the grounds in front and in the rear may, therefore, be entirely different in spirit and in character.

Groups of trees and shrubs, with accompanying lawn areas, are the life of any place. Here in California we have wonderful opportunities of using both native and exotic evergreens, as well as drawing upon the rich resources of the East. The plantings of any estate should have an underlying motive. What could be more appropriate than to use the California Live Oak (*Quercus agrifolia*), if already growing on the estate, as the principal motive, with a stream, bor-

dered by Bay Laurel (*Umbellularis californica*), as a secondary motive. Associated with the California Live Oak are such native trees: as, the California Cherry (*Prunus ilicifolia*) and the Catalina Cherry (*P. ilicifolia integrifolia*), the Madrone (*Arbutus menziesii*) and Manzanita; the crimson-berried Christmas Berry (*Heteromeles*, or *Photinia arbutifolia*); occasionally the California Buckeye (*Aesculus californica*); Catalina Ironwood (*Lyonothamnus floribundus asplenifolius*); the Santa Barbara, or Matilija Poppy (*Romneya coulteri*).

In lieu of native specimens, some one form of exotic tree or shrub, or even a fruit tree, may be selected, or the special form or size of groupings may be considered. Frequently, a garden ornament, such as a sun-dial, may furnish the central motive, with all plantings subsidiary to this. Some of the native coniferous trees, especially the California Redwood (*Sequoia sempervirens*), accompanied by its close relative, the California Big Tree (*S. gigantea*), make splendid motives. California abounds with many conifers, including Pines, Spruces, Firs, Cypress, Arbor Vitae, Douglas Spruce (*Pseudotsuga douglasi*), Incense Cedar (*Libocedrus decurrens*),

which may be utilized to advantage in naturalistic plantings.

A beautiful garden can never be made simply by sticking a few trees and shrubs here and there, and filling in with flowers. Let us conceive of every tree, shrub, and plant as having a distinct individuality, this individuality being expressed in terms of form, foliage, flowers and fruit. This tree, with its loose form and graceful, arching branches, had best be planted by itself; that compact little shrub, with rounded contour and erect, smooth branches and foliage, looks best planted near the entrance of the house; this plant, with its somewhat garishly colored flowers, would clash with plants having flowers of softer tones.

It is only by studying the forms and colors of leaves and flowers, the shapes and varying heights of trees and shrubs, that a proper conception can be obtained of how to group these various elements. In addition, through constant study and reflection, we must develop a feeling for various plant forms, so that no possible mistake could be made in selecting and grouping specimens for a particular purpose.

Let me cite several examples to illustrate my point. The Date Palm (*Phoenix canariensis*), regal in appearance, is one of our most magnificent palms, if placed in the right position. How too frequently is it planted in the worst possible place—in the center of a twenty-foot square lawn, or in the midst of a group of shrubbery, totally dissimilar in form and foliage. Its rightful position is on a spacious lawn, off-setting a corner of the residence, where it may have full opportunity of displaying and developing its beautiful fronds.

Or take the very symmetrical Norfolk Island Pine (*Araucaria excelsa*), with its branches arranged in tiers or whorls about the trunk, with an interval left bare between the tiers. What a dilapidated specimen it becomes when crowded out by other trees in too close an association. It can never become interesting with the lower branches dead, and only the top alive.

It is this lack of judgment and far-sightedness that has ruined hundreds of gardens in California. One other point before leaving this topic:—if you know beforehand that trees are likely to become too crowded for their best development in the course of years, be prepared to mercilessly cut out some of them when the time comes. This statement does not apply to trees and shrubs which look well

when massed closely together, but only to those which seem to prefer lots of room for their best development.

In grouping trees and shrubs, attention must be paid to the different shapes and varying heights of individual specimens. Remembering that some forms appear to best advantage when planted separately, such trees and shrubs having the same general contour or outline, and blending in foliage, should usually be planted in mass. Occasionally, for the sake of pleasing contrast, a tree or shrub, differing from the rest in habit and foliage, but not clashing, may be introduced. They should be so placed, with low shrubs in the foreground and taller shrubs or trees in the rear, as to give the most graceful and flowing contour lines. Only an intensive study of different forms can give an adequate idea of how to properly group them.

The borders of the shrubbery groups should also be given proper consideration; a flowing, sinuous line is usually much more pleasing than a straight, stiff line, although formal settings sometimes require straight lines. Do not plant specimens so closely together as to prevent some natural expan-



sion, although certain forms will permit crowding. Here, again, a knowledge of the habits of growth of different species is necessary. The planting of perennials, with flowers of bright hues, has much to commend it.

In a paper of this character, it would take too long to enumerate and describe the great bulk of trees, shrubs and plants which could be utilized in planting schemes. However, I shall endeavor to discuss a few of the more prominent and best species, especially evergreens, with some suggestions for their proper placement.

Many of the berried shrubs are very beautiful, both in fruit and in flower. The many Cotoneasters and Pyracanthas (Evergreen Hawthorn), closely allied to the Crataegus Hawthorn, and natives of the Orient, with white or pinkish, sweet-scented flowers, and orange-red, yellowish red, or scarlet berries, are excellent for securing spring, summer and winter flower and berry effects. The Pyracanthas do not vary greatly in height, but the Cotoneasters vary from the dwarf *C. microphylla*, excellent for rockeries and in corners of walks, with tiny leaves and a great profusion of white flowers, followed by purplish red berries, to *C. frigida*, a very vigorous species, with large clusters of white flowers, followed by scarlet berries. Excellent group effects can be obtained by noting the varying heights of different species of Pyracantha and Cotoneaster, and grouping them accordingly. Some of the best species include: *P. crenulata*, *P. angustifolia*, *P. coccinea*, *C. pannosa*, *P. horizontalis* (a low form), *C. angustifolia*, *C. nepalensis*.

A genus of shrubs represented by *Berberis* (Barberry) looks well when grouped with Cotoneasters. One of the prettiest species is *Berberis darwini*, Chili, with drooping branches, prickly, holly-like leaves, turning to shades of red in the fall, and short, tubular, golden yellow flowers in clusters, followed by large blue or purplish berries. *B. ilicifolia* is similar to the above, while *B. stenophylla*, a Garden Hybrid, is a shrub with slender, arching branches, and spiny leaves, dark green above, silvery beneath. Other species, including the dainty *B. Wilsoni*, are recent introductions.

The Brooms, represented by species of *Cytisus*, *Genista*, and *Spartium junceum* (Spanish Broom), are excellent for giving body to groups, and for supplying continuous bloom. The Portugal Broom (*C. albus*), a small shrub, is literally a mass of bloom in spring. Another spring bloomer is the Bridal Veil (*G. monosperma*), with drooping, sil-

very, almost leafless branches, and white flowers. Summer bloomers include: the Scotch Broom (*C. scoparius*), and *C. canariensis*, both with clear yellow blossoms; *C. scoparius andreanus*, a variety of the Scotch Broom with mahogany yellow flowers. A diminutive little shrub, appearing to advantage when placed in front of some of the Brooms, is *Coronilla glauca*, with fine, glaucous foliage, similar to that of the Scotch Broom, and deep golden yellow flowers, arranged in little coronets.

The splendid Heaths or Ericas, with tiny leaves and bell-like flowers, which must not be confused with the Scotch Heather (*Calluna vulgaris*), are worthy of first consideration in any plantings. Of medium or low growth, they are especially suited to the Bay region, and are particularly desirable because of the winter-blooming habit of some of the species. The symmetrical, globular Mediterranean Heath (*E. mediterranea*), with dark green foliage, and tiny pink flowers, is probably the best known and most popular of the Heaths; it is a winter bloomer. *E. melanthera*, a rather tall species, with lighter green foliage and larger flowers, rosy with protruding, black-tipped stamens, is excellent for cutting. Varieties of *persoluta*, with pure white or rosy white flowers, bloom in spring. Many other choice varieties could be named, making it possible to secure many interesting combinations of the Heathers.

A delicate-appearing, but hardy little shrub, resembling somewhat the Ericas, goes by the name of the Breath of Heaven (*Diosma ericoides*), from Africa. The minute leaves are very fragrant, and small, white, star-shaped flowers, literally covering the bush, bloom continuously. It can either be placed in the foreground or be trained to form a small hedge. Another excellent shrub for the foreground is *Pimelia ferruginia* (*P. decussata*), about three feet high, with close-set foliage, and rosy pink flowers, arranged in heads at the ends of the branches.

Other shrub forms of medium height include: *Abelia rupestris*, with gracefully arched branches, glossy green leaves, tinged with red, and tubular white flowers flushed with pink; the dainty little shrub with the tongue-twisted name (*Grevillea thlemanniana*), with finely divided, light green foliage, and clusters of honeysuckle-like, rosy-pink flowers, haunted by humming-birds for the sweet nectar hidden in their spurs; low-growing forms of *Eugenia* and *Myrtus*, with

(Continued on page 48)

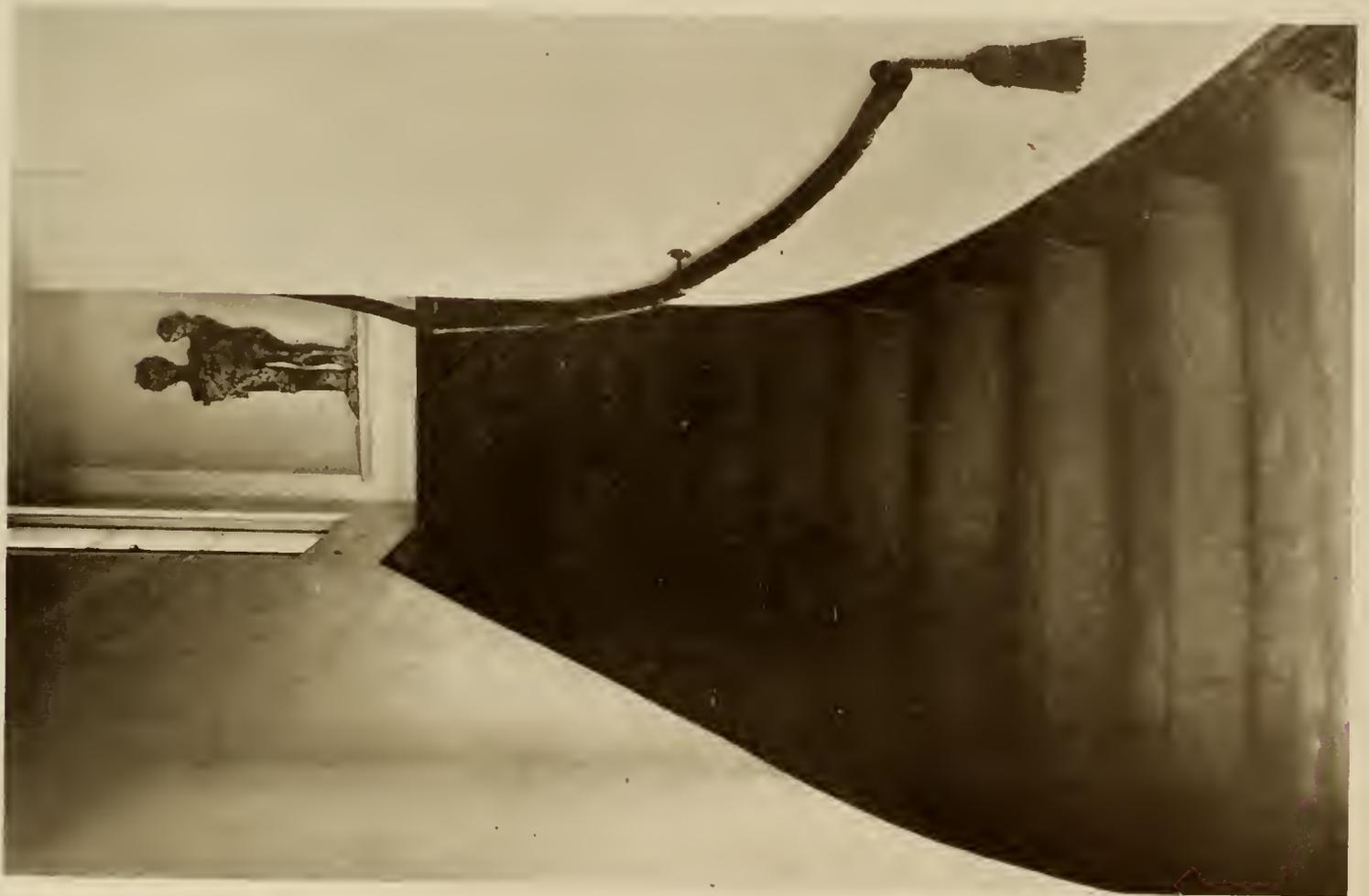


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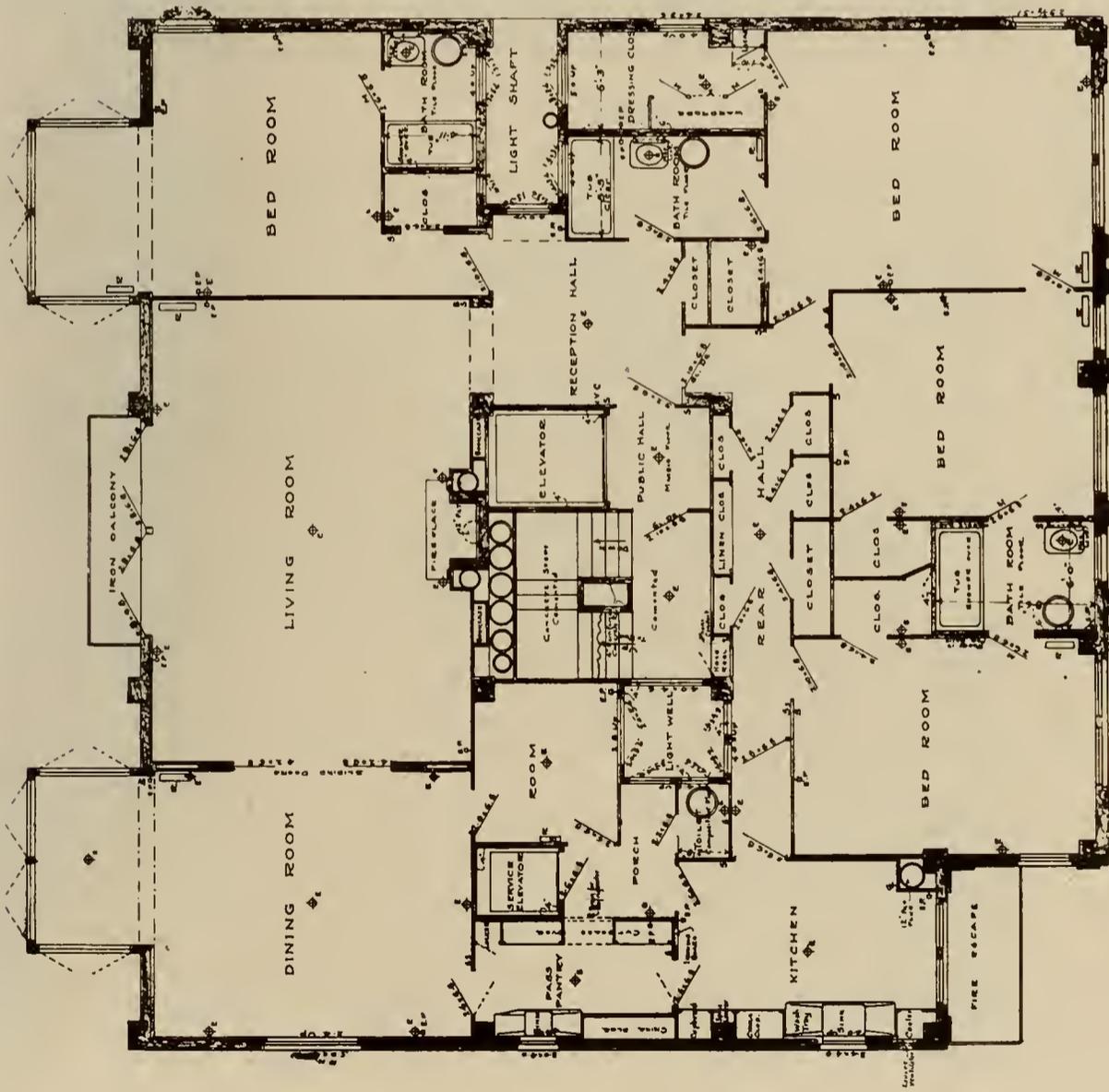
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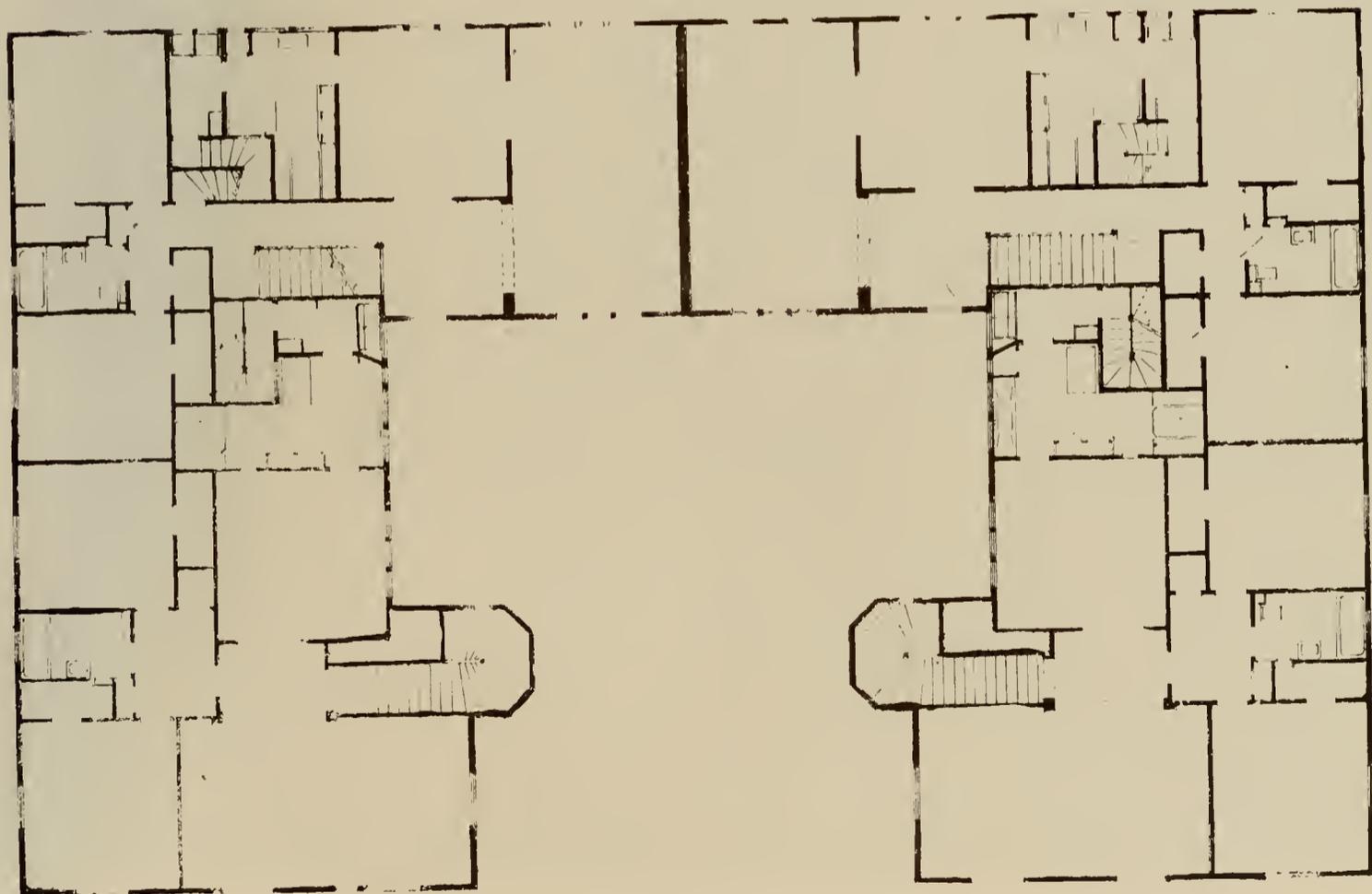


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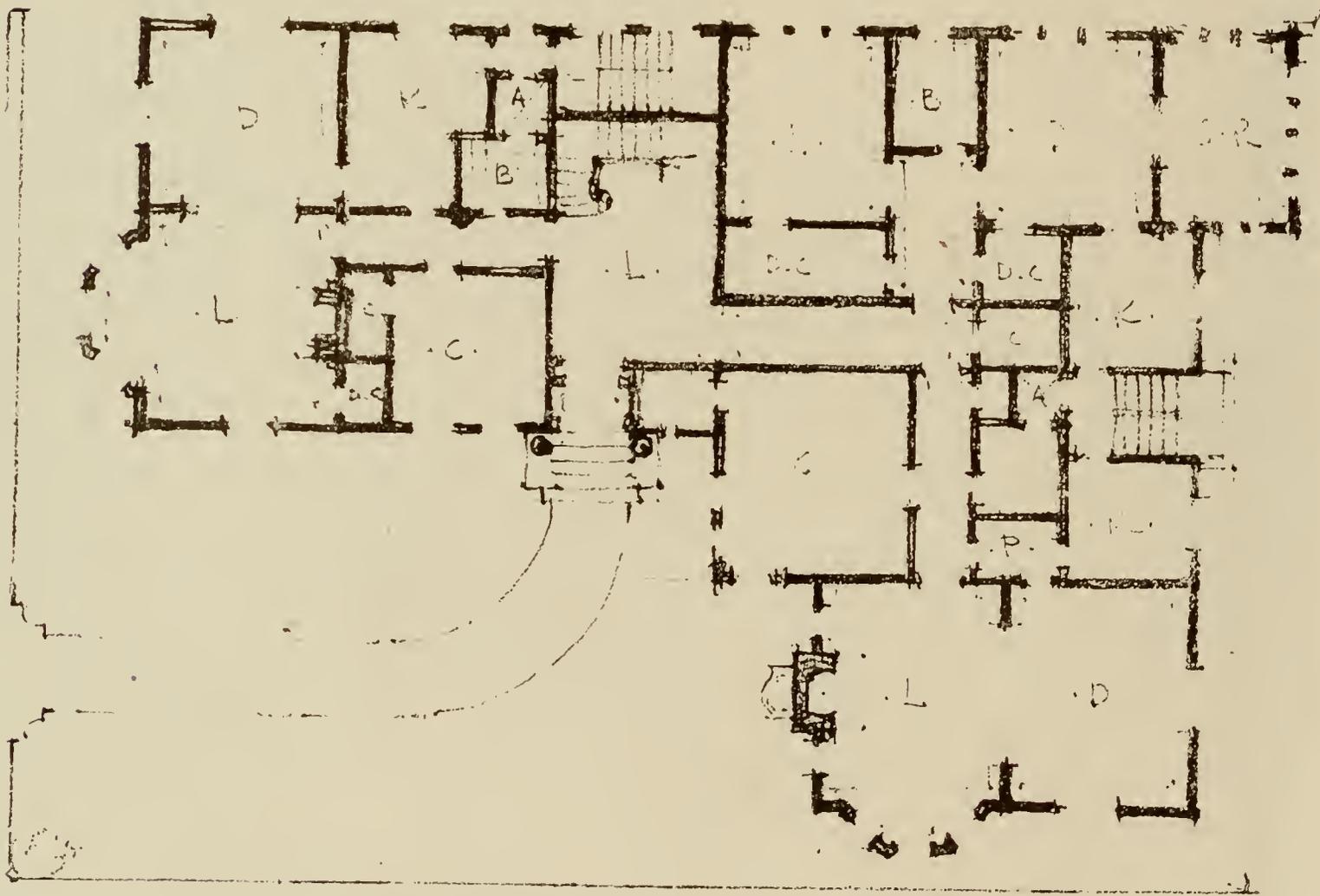


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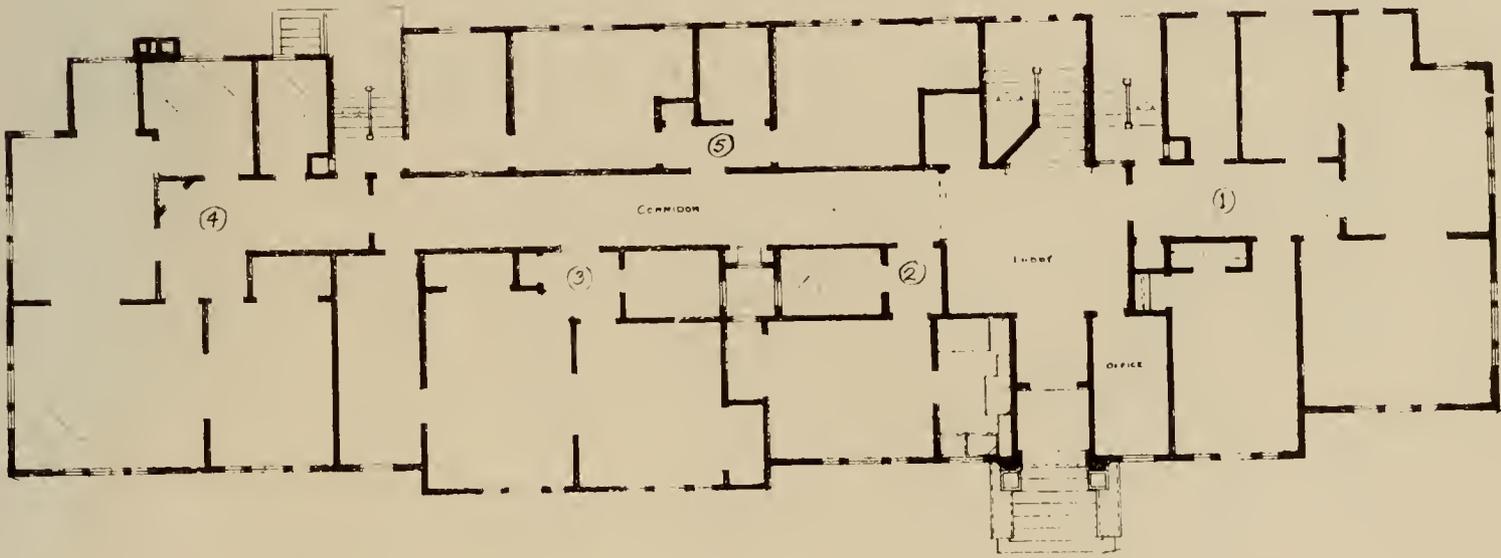


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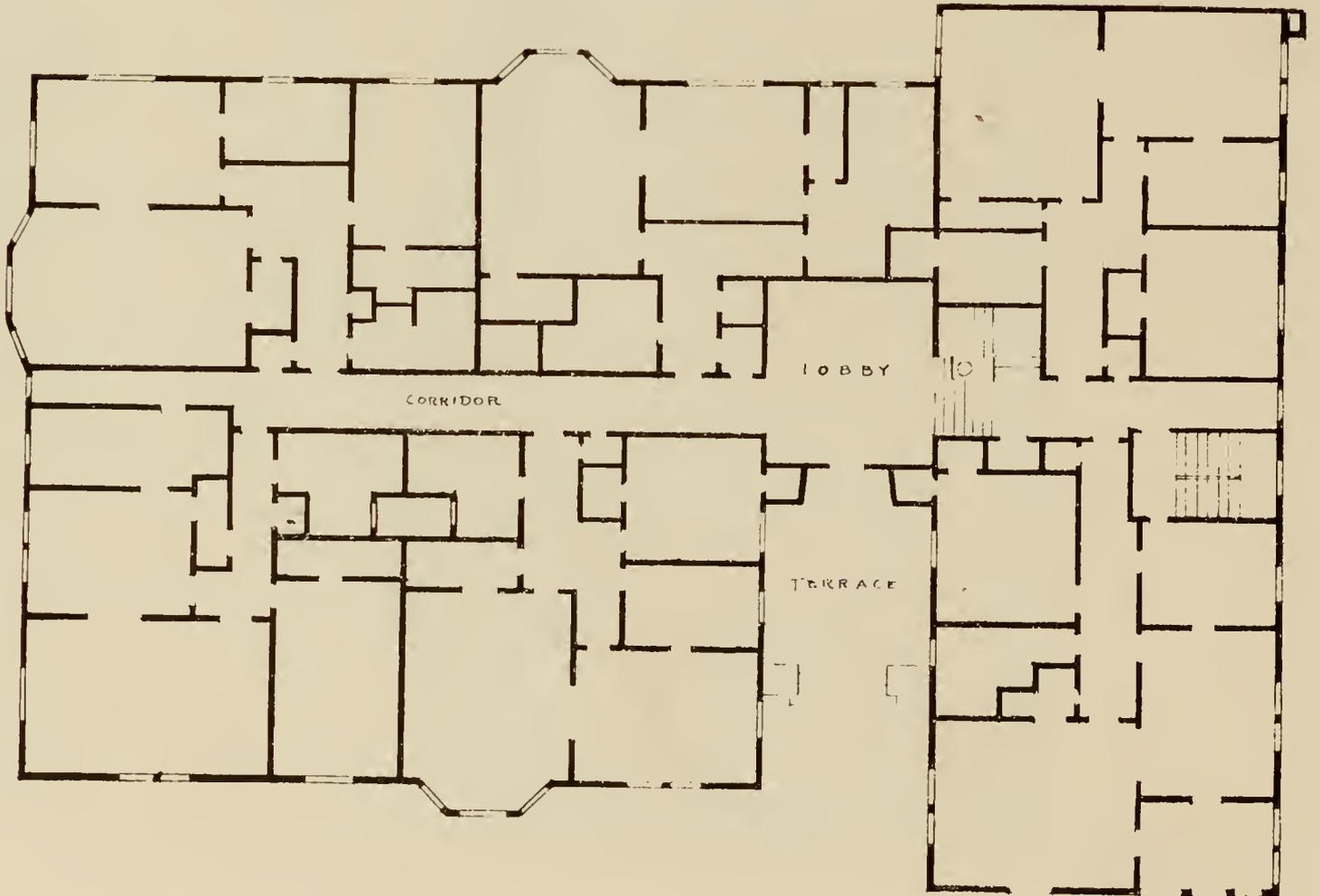
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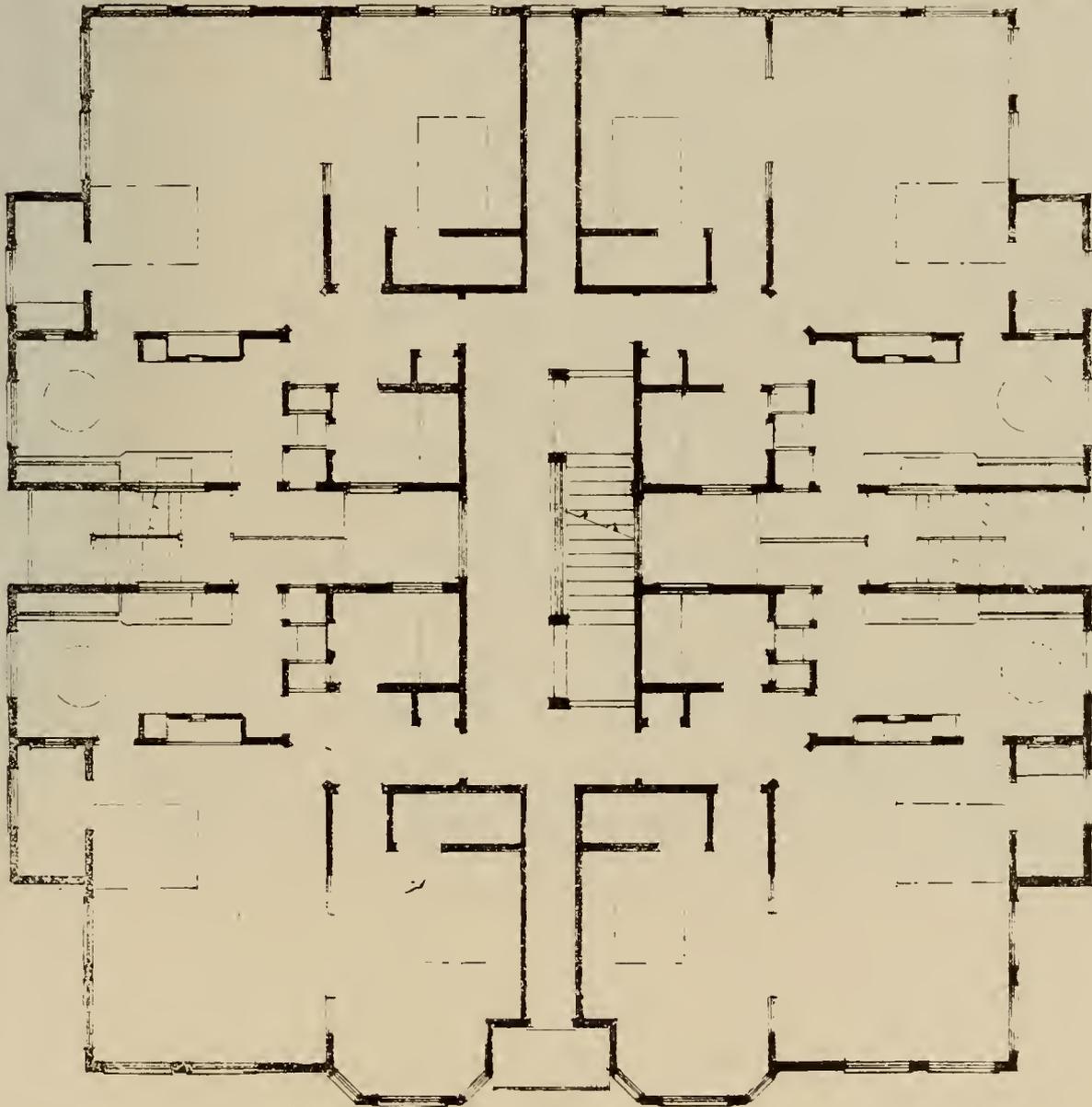
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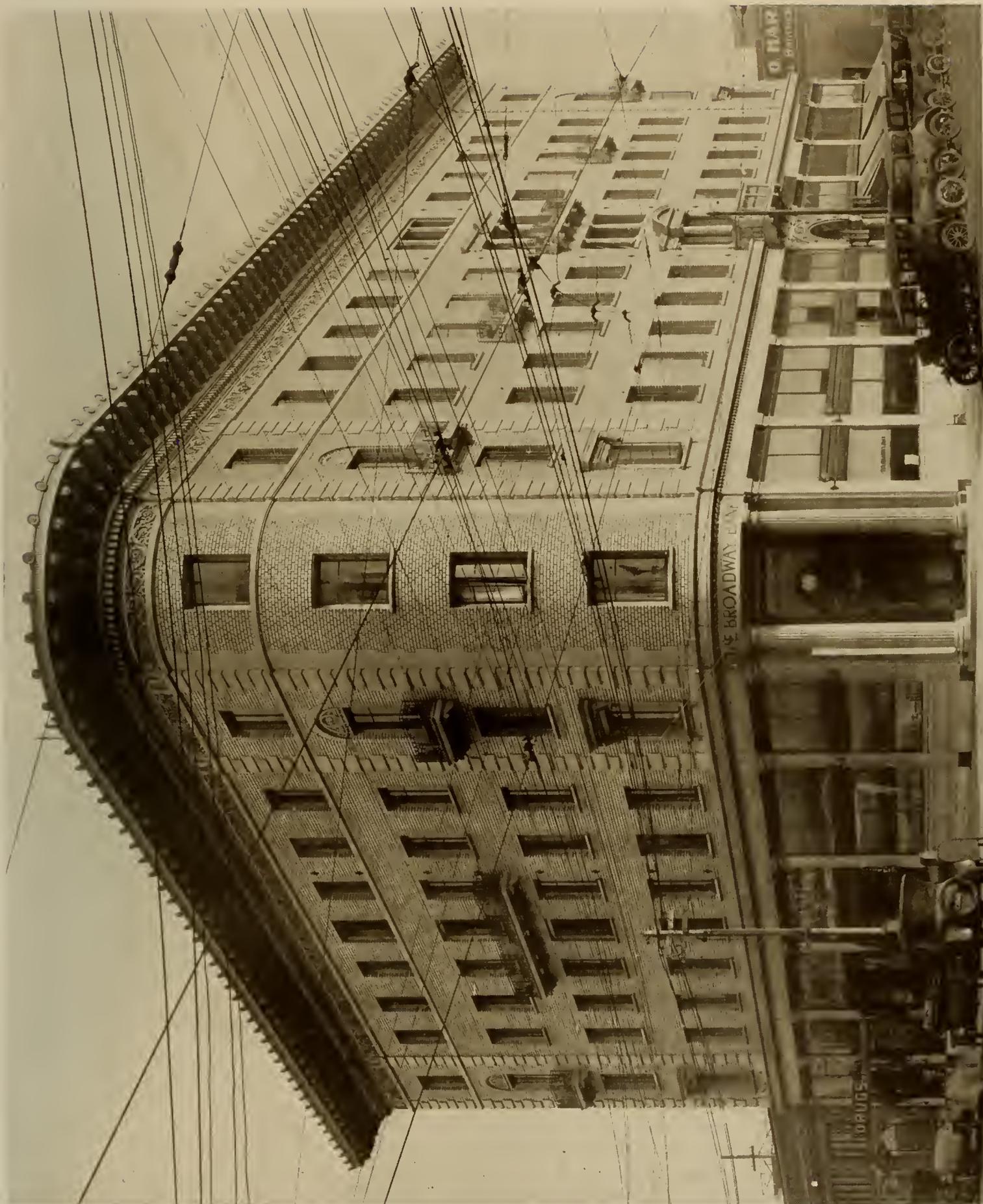


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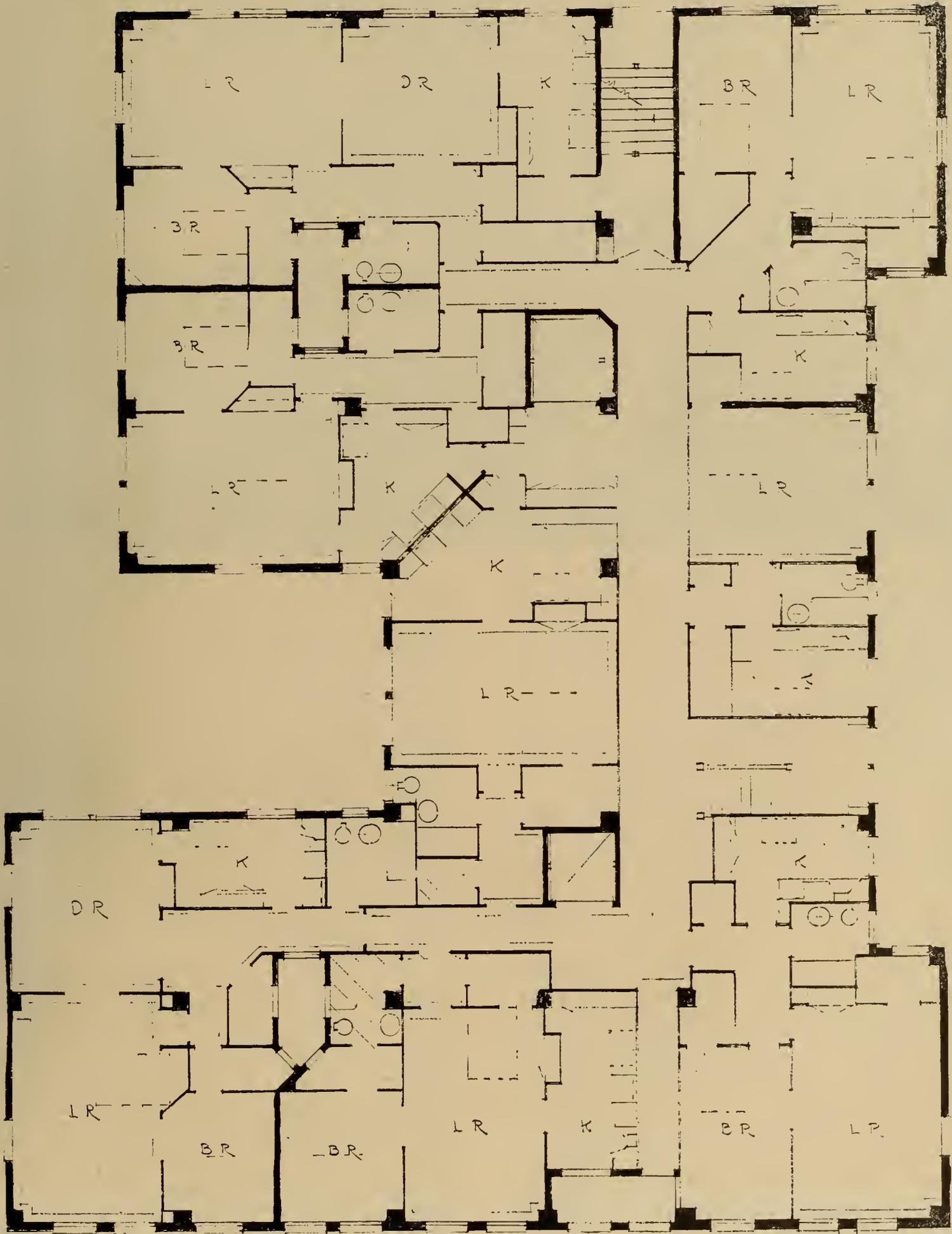


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THE BUILDING REVIEW



PALAZZO APARTMENTS, BERKELEY, CALIFORNIA

C. N. BURRELL, ARCHITECT



(Continued from page 46)

sharply-pointed, dark green, glossy leaves, and sweet-scented, white flowers; the Mexican Orange (*Choisya ternata*), a compact, roundish shrub, with tri-foliolate leaves, and very fragrant, orange-like blossoms; *Coprosma baueri*, with large, oval, very shiny foliage, dark green above, pale green beneath; the stiff, compact, little *Rhaphiolepis japonica*, with round, leathery leaves, fragrant, white flowers, followed by clusters of dark blue berries; *Evonymus japonicus*, similar in some respects to *Coprosma*, a very hardy and useful shrub; species of *Cistus*, the Rock Rose.

The many different *Veronicas*, introductions from New Zealand, including good-sized and low-growing forms, fill a very important place in planting schemes. The genus is well represented in St. Francis Woods, San Francisco. The majority of the species are round-symmetrical in shape, with glossy, oval, thick-set leaves, sometimes variegated, and spikes of white, blue, purplish, rosy, red, or scarlet flowers. *V. elliptica* (*V. decussata*), with blue or purple flowers; *V. speciosa* with purplish white flowers; *V. spec. imperialis* with carmine red flowers; *V. Traversi*, *V. buxifolia*, and *V. Lewisii*, with white flowers; *V. cupressoides*, a cypress-like species, with lilac flowers; *V. Chathamica*, a trailing kind, with violet flowers—are a few of the best species.

The Bottle Brush group of shrubs, represented by species under *Callistemon*, *Melaleuca*, and *Metrosideros*, Australia, are exceedingly interesting because of the inflorescence shaped like a bottle brush in many of the species; in some species the inflorescence is a small head. The colors of the flowers range through white, cream, rose, pink, lavender, carmine, and other shades of red. Habits of growth vary from a stiff, upright growth to shrubs with pendulous, arching branches; leaves vary from broad, leathery to finely divided foliage. The different forms are good fillers, and add variety to groupings.

Of broad-leaved evergreens, the *Pittosporums*, natives of Australia and New Zealand, upright and graceful of form, with smooth, glossy, wavy-margined foliage, are excellent for furnishing background, for planting in mass, or for making hedges. The best species include: *P. tenuifolium* (*P. nigricans*), with small, dark green leaves, and black flowers; *P. eugenoides*, with yellowish green foliage; *P. crassifolium*, with very downy leaves, dark green above, silvery beneath; *P. tobira*, the Japanese *Pittosporum*, with rather stiff, leathery leaves; *P. undulatum*, the Victorian Box, a round-headed tree, with dark green foliage, and very fragrant, yellowish-white flowers; *P. phillyraeoides*, a weeping species.

(Continued on page XIII, Adv. Section)

OFFICIAL NEWS OF COAST CHAPTERS, A. I. A.

SAN FRANCISCO CHAPTER, OF THE AMERICAN INSTITUTE OF ARCHITECTS

The regular meeting of the San Francisco Chapter of the American Institute of Architects, was held in the rooms of the San Francisco Architectural Club, 77 O'Farrell street, on Thursday evening, March 16th, 1922. The meeting was called to order by President Geo. A. Applegarth. The following members were present:

Geo. A. Applegarth, Fred H. Meyer, John A. Baur, Al J. Evers, Morris M. Bruce, Chas. P. Weeks, E. A. Coxhead, John Norberg, Wm. A. Newman, B. S. Hayne, S. Schnaittacher, John Bakewell, Arthur Brown, J. S. Fairweather.

Minutes

Minutes of the previous meeting were read and approved.

Report of Committee

Report of F. H. Meyer on "Quantity Survey" is as follows:

1st. That a Committee be appointed, composed of two Architects, two engineers, one general contractor, one specialty contractor, a mill man, a member of the Industrial Association, a member of the Savings Bank Association, and a member of the Real Estate Board.

2nd. That the Committee be appointed for their special fitness and that before appointment that they be sold to the Quantity Survey System, and that before the Committee functions that each Committeeman have the full approval from the organization which they represent, indicating their sympathy with the Quantity Survey System.

The duties of the Committee will be:

1st. To outline the organization of a Quantity Survey Company, it being suggested that such a Company be organized somewhat in the same manner as the Title Insurance Company.

2nd. To determine if it would be advisable to guarantee quantities.

3rd. To determine who shall pay the fees covering the making of Quantity Surveys and to otherwise consider the general limitations of the proposed organizations.

If the general scheme of the Quantity Survey System, as outlined above meets with the approval of the Chapter Directors, I would suggest that a letter be written inviting various organizations, as outlined above, to participate in the deliberations of the committee and if a proper response is received, that the Chapter then actively push the matter to a definite conclusion. Such a letter naturally must be very carefully written, as it will be necessary to practically outline the scheme and also to state clearly the benefits that the inauguration of the Quantity Survey System would bring to the Building Industry.

I have discussed this question very seriously with many of the men connected with the building industry, and it has been universally approved, the concensus of opinion, however, being that it will be necessary to organize a Company as I have outlined above to properly care for the business which will be naturally thrust upon it.

New Business

A letter in regard to suspension of William Binder, Edw. W. Cannon, Bernard J. Joseph and James Seadler, was read and it was pointed out by Mr. S. Schnaittacher that all these members have inalienable rights to San Francisco Chapter, and that the Institute be notified of same.

A letter from the Institute electing Russel Ray as member was read and ordered filed.

A communication from the Nebraska and Washington Chapters in regard to their choice of Mr. W. B. Faville for next President of the Institute was read and placed on file.

A letter regarding transfer of Col. Norton E. Wood to the Washington, D. C. Chapter was read and placed on file.

A letter in regard to medal fund in San Francisco Chapter was read and ordered answered.

Adjournment

There being no further business the meeting adjourned.
Respectfully submitted,
J. S. FAIRWEATHER.

CALIFORNIA STATE CIVIL SERVICE EXAMINATION. Assistant Architectural Designer, Grade IV.

Date of Examination, May 27, 1922. Last day for filing applications in Sacramento, May 20, 1922.

The California State Civil Service Commission announces an examination for the position of Assistant Architectural Designer, Grade IV, to be held in San Francisco and Los Angeles on May 27, 1922. The salary range is from \$235 to \$280 a month.

The duties of the position are, under specific administrative and technical direction, to perform work of the following character: to carry out studies and make the computations necessary for the preparation of designs and estimates; to assist in designing and planning important buildings and groups of institutional buildings; and to perform related work as required.

Candidates must submit evidence of at least two years of experience in architectural work, together with either graduation with a degree from an institution of recognized standing with major work in architecture, or at least two years of additional architectural experience. They must also have proven technical knowledge of proficiency. The completion of each full year of such college course will be considered the equivalent of six months of experience.

The examination is open to all American citizens who have reached their twenty-first but not their forty-fifth birthday, who are in good physical condition, and who meet the requirements outlined above.

The subjects of the examination are as follows:

Subjects	Relative Weight
1. Practical Test.....	40
This will consist of a test of the candidate's ability in designing, working upon a subject to be announced at the time of the examination.	
2. Training, Experience and Fitness.....	60
Those candidates who secure a rating of at least 70 per cent in the practical test will be	

given an oral interview by a special board of examiners appointed for the purpose by the Civil Service Commission, at which time they will be rated upon their training and experience, and their fitness for the position.

In connection with this interview, candidates will be required to submit specimens of their work for the inspection of the board of examiners.

Total..... 100

Candidates must secure a rating of at least 70 per cent in the oral interview in order to pass the examination.

Six hours will be allowed for the practical test, from 9 a. m. to 12 m., and from 1 to 4 p. m.

For the practical test, candidates must come provided with tracing paper for studying problems and a sheet of detail paper 24 in. by 36 in., for finished drawing, T-square, triangles, instruments, pencils, materials for rendering, etc. They will be called upon to make a suitable presentation of their designs in any methods of rendering they may choose. It will also be optional with them whether or not they present a design either in perspective or direct elevation.

Persons desiring to enter this examination may secure application blanks from the State Civil Service Commission at Room 331, Forum Building, Sacramento, Room 1007, Hall of Records, Los Angeles; and from the following offices of the State Free Employment Bureau:

771 Howard St., San Francisco; 401 Tenth St., Oakland; 176 So. Market St., San Jose; 916 H St., Fresno; 200 So. San Joaquin St., Stockton; 206 Court St., Los Angeles.

Completed applications must be filed with the State Civil Service Commission, Forum Building, Sacramento, on or before May 20, 1922.

STATE CIVIL SERVICE COMMISSION.

INDUSTRIAL

CONVENTIONS TO BRING \$30,000,000 TO SAN FRANCISCO

The convention delegate has been classified by experts as being 50 per cent "business scout." Inasmuch as business usually follows the scout, all California has a vital interest in the fact that more than 400,000 of these "scouts" are coming to San Francisco this summer. Altogether aside, however, from such "business" in the shape of new capital, new enterprises and new settlers as may come to us directly from this convention business, we have direct business in the alluring form of the money these visitors must spend for shelter and sustenance while here.

This money is estimated at more than \$30,000,000, and the estimators declare that this figure is so extremely conservative that it might be increased \$5,000,000 or \$10,000,000 without overshooting the mark.

The great value to industry and business of the convention visitor lies in the fact that he is always a leader in his own community; a person with more initiative than the average, and one to whom his neighbors will listen with interest when he goes home and tells them all about it.

The convention is a powerful and discriminating factor in the selection of new population composed of the most wholesome elements. The convention delegate, as said before, is always a leader in his own community. The road to leadership lies in the ability to strike out on new paths, to break new ground. A new country appeals to this kind of a person, and the visitor to California who once feels the appeal is either sold or a mighty good prospect.

When the man who is sold to California goes back to his home in the East he either returns himself to become a settler or persuades some of his neighbors to take that step.

The business of bringing conventions to San Francisco is entrusted to the San Francisco Tourist and Convention League. Back of this league, financially, are the business

men of the city, the hotels and the city itself. The man that transforms this backing into the intelligent and well directed energy that "brings home the bacon," is Robert L. Webb, who, unfortunately, is too busy to sit down and tell how he does it. The result of his activity can be summed up in the announcement that as the direct result of it more than 100 conventions will be held in San Francisco this summer, and that 400,000 delegates will attend the conventions.

Getting conventions isn't merely a matter of inviting organizations with the convention habit to San Francisco. Before a convention closes, the place for the next convention is selected. Every city big enough to entertain a convention appreciates the advantage of the opportunity to "show goods" to the kind of selected "business scout" of which delegate material is composed. Cities other than San Francisco have their Convention and Tourist Leagues, and send their Robert L. Webbs to influence conventions in choosing meeting places. And at every convention, as a result, contending cities line up their friends and arguments and stage a battle for the next convention.

The life of a convention scout is like a continuous political campaign. Webb has developed a speaking voice that scorns the use of a magna vox and a knowledge of convention psychology which has enabled him to handle some very difficult situations. Two of the conventions that will meet in San Francisco this year were won by the narrow margin of one vote. This gives some indication of the competition the San Francisco Convention and Tourist League must meet and overcome to maintain the record established by the energy of Mr. Webb.

The biggest convention will be the Shriners, who will invade San Francisco in numbers estimated at from 200,000 to 250,000, and will be in session June 13, 14 and 15.

The National Real Estate Board, which

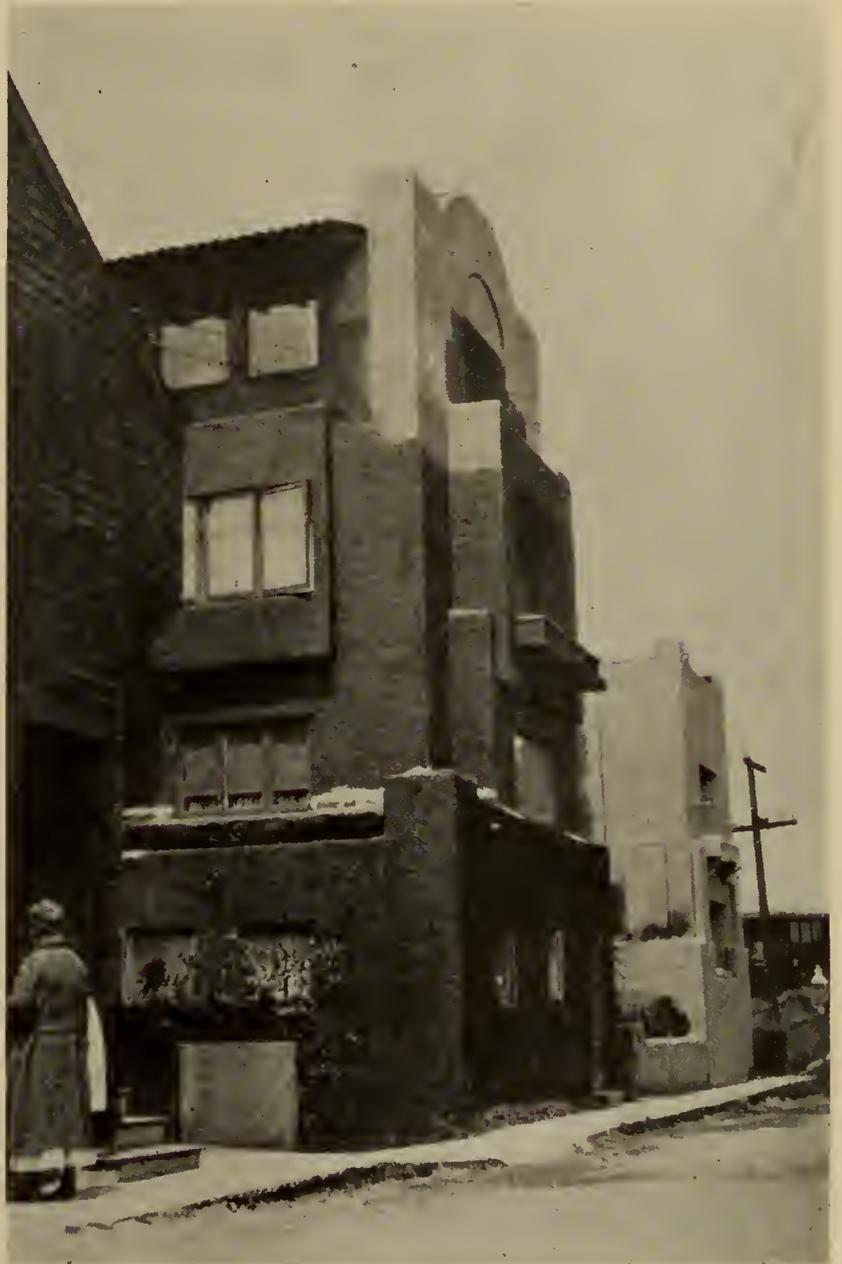
(Concluded on page 54)

100 PER CENT. WATERPROOFING

It is only too often found that the weak spot in the construction of a building makes itself known sooner or later by the appearance of dampness through walls, which ruins wall paper or paints and even finds its way to the ceilings, leaving ugly marks disfiguring the otherwise so harmoniously decorated rooms. A building may be a veritable triumph of architectural beauty and yet remain a constant source of complaint and annoyance to the architect, although he is not to blame for its occurrence. Sometimes the trouble can be laid to settling of the structure or the use of materials which seem to invite dampness after a short time. Other times it may be



APPLYING THE WATERPROOFING WITH AIR BRUSH



Partially Completed Job, Showing Concrete Paint Being Applied Over "Insulite Waterproofing"

caused by too hasty construction or poor workmanship. Repairs to occupied buildings are costly, difficult and annoying, and the tendency is to devise some cheap method of patching, which is neither lasting nor a credit to the man who does the work and in many cases, where exposed to view, a constant eyesore to the owner of the building.

Waterproofing to be deserving of this classification must be 100 per cent. The remedy for lack of waterproofing or trouble in spite of an honest effort having been made in the first place, can be found only in the application of the highest skill and the best materials obtainable. So many materials have been

placed on the market and so many methods devised to take care of troubles of this nature, that the architect often finds himself in a quandary what to recommend.

Waterproofing to become perfect must first of all have a proper foundation. It is only too often that this law is violated. The salesman, his mind trained on the subject of turning over his stock on hand, or the selling of a minimum quantity in a given period of time, too frequently uses this expression: "It will stick to anything, just apply it over the old roof, you can do it yourself and it will cost you very little that way." There is no part of a building requiring as much careful study of the causes leading up to the trouble in question as is the case with water-proofing, and if a structural change seems advisable before the actual treatment is commenced, it is the wise man who does so rather than to take the advice along the line of the easiest way.

Waterproofing applied to the outside of a structure must have great penetrating properties and must form a firm bond with the surface to be waterproofed. It must also be sufficiently elastic to follow the movement of the surface to which it is applied, and most important of all, it must be of such nature that it is not affected by temperature changes or the action of lime, alkali and acids and must take paint without staining through.

Exposed to the severest temperature changes and weather conditions and with its many projections, window boxes and its flat roof portion, the beautiful residence of Mrs. O. C. Stine at 1071 Vallejo Street, San Francisco offers examples of most every kind of condition encountered in its class of water and damp-proofing. Moisture coming through the walls and ceilings in this residence in several places could be laid to as many different sources, so that no single method of treatment could be relied on thoroughly to overcome the trouble. Careful inspection, uncovering of all doubtful sections and their rebuilding was made the rule to follow before the actual work of waterproofing was started.

Our illustrations show exterior views of the residence during the progress of waterproofing which was performed by the Insulite Chemical Company, 373 Monadnock Building, San Francisco. The material used

(Concluded on page 54)

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STATEMENT OF OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST, 24, 1912,

Of The Building Review, published monthly at San Francisco, Calif., for April 1st, 1922.

State of California, County of San Francisco—ss.

Before me, a Notary Public, in and for the State and County aforesaid, personally appeared H. R. Braden, who, having been duly sworn according to law, deposes and says that he is the Business Manager of The Building Review, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form, to-wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Publisher, The Building Review Company, 50 Main Street, San Francisco.

Editor, Harris Allen, Architectural, 50 Main Street, San Francisco.

Industrial Editor, Lindsay Campbell, 50 Main Street, San Francisco.

Business Managers, H. R. Braden, 50 Main Street, San Francisco.

2. That the owners are: (Give names and addresses of individual owners, or, if a corporation, give its name and the names and addresses of stockholders owning or holding 1 per cent or more of the total amount of stock.)

Harris Allen, Central Bank Bldg, Oakland.

A. Hoffman, 245 Mission Street, San Francisco.

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H. R. Braden, 50 Main Street, San Francisco.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.)

None.

4. That the paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is (This information is required from daily publications only.)

H. R. BRADEN, Business Manager.

Sworn to and subscribed before me this 31st day of March, 1922.

(SEAL)

D. B. RICHARDS,

(My commission expires May 26, 1925.)

THE IMPORTANCE OF A SHIP SUBSIDY

Why a Ship Subsidy is Necessary

Industrial development and the Merchant Marine are closely associated. Everybody interested in the former is watching with more or less interest the efforts now being made through Congress to establish the American Merchant Marine on such a basis that it can be built up and maintained, and that under private management, in competition with the more cheaply built, more cheaply operated and government aided ships of foreign nations. The Building Review has secured from the United States Shipping Board the following summary of reasons why the American Merchant Marine, on which, in the event of war we will have to depend for necessary naval auxiliaries, should be given government aid.

British labor costs are from 35 per cent to 45 per cent lower in practically all industries than are similar American costs. This creates a differential against products of American labor in the proportion that labor enters into these products. The labor affecting American shipping costs comprises: the labor involved in building and in repairing the vessels, the labor involved in operating the vessels at sea, and the labor involved in controlling the operations of the vessels from on shore.

The effect of the higher cost of American labor is to add an annual differential to the operating cost of an American ship which will run from 3 per cent to 5 per cent per annum on her cost. In other words, a modest dividend rate is absorbed in paying for the construction of the ship in American shipyards, her operation by American officers, her manning by a crew shipped in an American port, and her control by a short staff paid at American wages.

In the past the wages of the crew have been especially stressed in commenting on the difference in cost of operation between an American and a British ship. It is true that for the tramp cargo steamer about half the differential existing is due to wage costs, especially to the difference in pay of the licensed officers who, by our laws, must be American citizens. For the larger and faster

ships, the express freighters, or the passenger vessels, which our merchant marine is so grievously lacking, this difference becomes less in importance compared to the tremendous difference existing in the cost of construction.

A ship of the George Washington type would cost in the United States about \$9,500,000. She could be built in England for about \$7,500,000 to \$8,000,000. The American owner of an American built George Washington would therefore have to carry during the life of the ship an excess capital cost of \$1,500,000 to \$2,000,000 on which he would be paying probably \$250,000 to \$300,000 per year more than a British owner of a similar ship. The payroll of this ship would be not less than \$450,000 per year, and would involve a wage differential of nearly \$100,000. The higher cost of repairs and of the American administrative staff would add to this another \$25,000, making a total annual differential against this ship of approximately \$400,000. This difference, it will be seen, amounts to 5 per cent on the first cost of the British ship of \$8,000,000. In other words, when the British ship is paying 5 per cent, the American ship would only be breaking even.

It was to meet these situations that the Board has recommended a schedule of direct aid based upon the partial equalization of the wage and first cost differentials existing between American ships and those of Great Britain. The schedule of payments provides for a flat rate of all low speed vessels based upon their size and mileage. For the fast, hence, much more costly vessels, of which our merchant marine is in great need, the scale of payments increases according to the speed so that the larger and faster ships get sums in proportion to their cost. The direct aid schedule will work out for nearly all types of ships at approximately 2 per cent per annum of the first cost.

The total subsidy which could be paid to the existing privately owned fleet would approximate \$12,500,000, from which should

(Concluded on page 54)

SHIP SUBSIDY

(Concluded from page 53)

be deducted approximately \$2,500,000 now being paid in the form of mail subventions. It has been estimated by the Board that an adequate American fleet composed of all the types of ships needed, would receive, according to the schedule, from \$30,000,000 to \$32,000,000 per year.

CONVENTIONS

(Concluded from page 50)

will be attended by about 5,000 delegates, will be in session from May 31 to June 3.

The Seventh Day Adventist convention which meets from May 11 to May 30, will be attended by 15,000 delegates from all over the world. The Adventists meet only every fourth year, and many of the delegates from remote places combine with the work of the convention the purchase of large quantities of goods and supplies for their private business. This because the convention city is usually a world market for supplies of all kinds, or located near one.

The Disabled War Veterans, 10,000 strong, will muster in San Francisco. There will be 15,000 Knights of Pythias here, 5,000 National Silver Leaguers and 2,000 International Fire Engineers.

It will be full house for the host city throughout the summer, and the best chance since the Panama Pacific Exposition for San Francisco and California to sell themselves to the world.

WATERPROOFING

(Concluded from page 52)

was Insulite Waterproofing on which we printed an article in our March issue. As can be clearly seen from the close-up view showing a man at work with an airbrush, the finish of the building is that known as pebble dash. To waterproof walls of this type without disturbing the architectural effect thereof, the material used must cover every particle with a film that will not run nor soften with heat nor become brittle and crack from cold. It must also be of such a nature that it will flow easily through the fine nozzle of the airgun, and fill every pore and crevice in the

wall surface. Insulite Waterproofing is the thinnest Waterproofing made and does not give the heavy coat of an asphalt paint. While this fact is its real merit, without seeing it applied, architects in general will not understand it and can not see why the heavy coat of asphalt is not as good or better. The value of Insulite Waterproofing consists in three things:—It has a greater penetration, filling the pores of the plaster or concrete and finally forming a film of Mineral Rubber, inseparable from anything to which it is applied. It is unaffected by heat and cold, lime, alkali and acids. It is nature's product, held in solution until applied, soon thereafter returning to its natural state, a tough, rubbery coating.

A small airbrush was used in the application of both waterproofing and the painting; air being supplied by a portable air compressor driven by a small electric motor, receiving its power from the house current. With this outfit not only was it possible to do this work economically and without spattering material on the woodwork and surroundings, but it brought the worker and his work together, so that every square inch of surface covered received his personal attention and inspection, in other words the work was 100 per cent perfect. Waterproofing done with a large spray and sometimes with the aid of a long pole, or with a mop, can never produce the results obtained by this method. This feature is clearly illustrated in the close-up view. In the view showing the entire building the waterproofing is shown in the black portion thereof, followed up by the concrete paint coat.

Another part of this residence which received treatment with Insulite was the flat roof. This roof had previously been covered with the ordinary kind of built-up roofing. This, however, did not give the service desired, due to the traffic it received when used as a roof garden. Insulite Mastic Flooring applied in four coats and extended up along the parapet walls and under the flashing thereof, now permanently protects this portion of the building from leakage, and also lends distinction to this portion of the building, so much valued by its owner on account of the view of the harbor and the Golden Gate. The finish is smooth as linoleum and of a pleasing maroon shade. This type of roof construction is now being specified for several buildings by architects who have had an opportunity of studying its superior qualities.

A Glimpse of some Stockton Buildings

THE
BUILDING
REVIEW



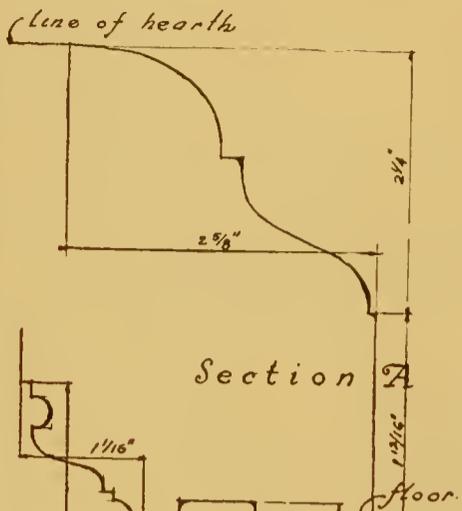
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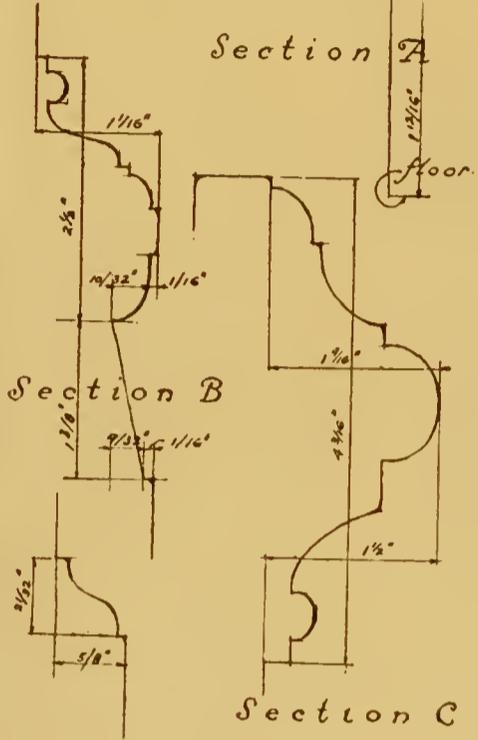
Vol. XXI No. 6

Published in San Francisco

All sections are drawn one-half full size



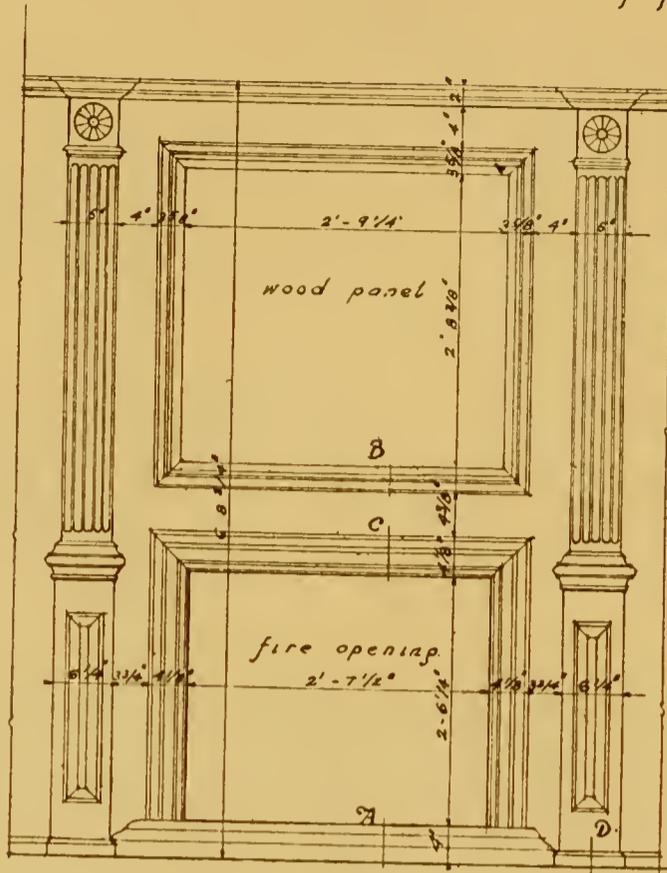
Section A



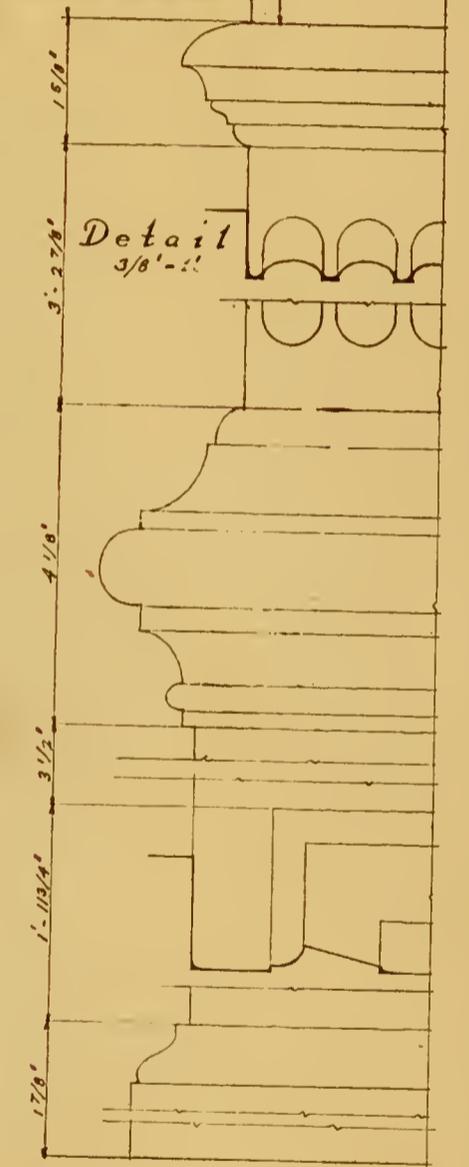
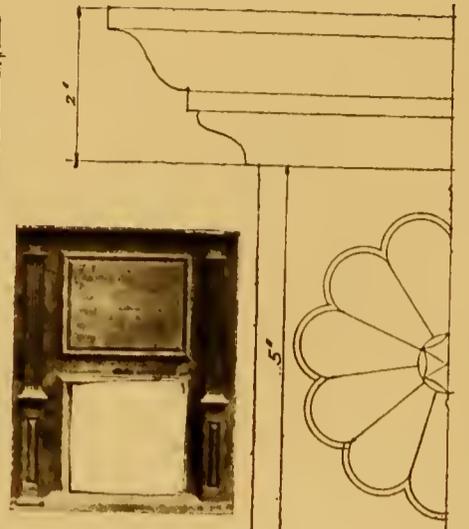
Section B

Section C

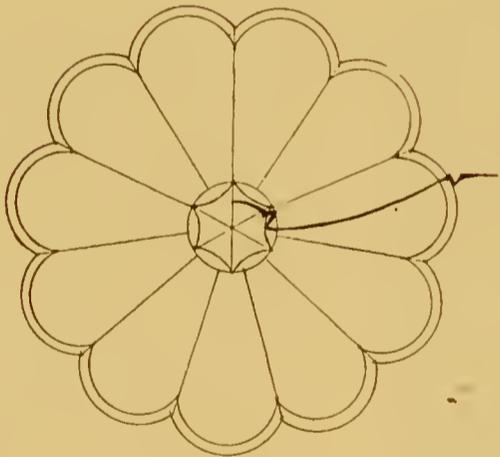
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Elevation
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Detail
3/8" = 1"



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THE BUILDING REVIEW

VOL. XXI. JUNE, 1922 No. 6

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Solicits correspondence as to partnership, in architectural practice or construction company, etc., would also consider administrative position with interest in business allied to Building or Architecture. Address, Building Review.



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4 Emergency Power Plants are Maintained

You may have confidence in the dependability of "Pacific Service." Four power-generating plants are maintained close to the centers of heaviest demand. They are operated to supplement the power produced by the 28 hydro-electric plants, located in the mountains. The power generating machinery in these four plants is driven by steam, so they are called "steam-electric" power plants.

The steam-electric plants are maintained in readiness to insure a steady flow of power until all the tasks of "Pacific Service"—domestic and industrial—are finished.

Ask the local P G and E office to tell you about other advantages of "Pacific Service."

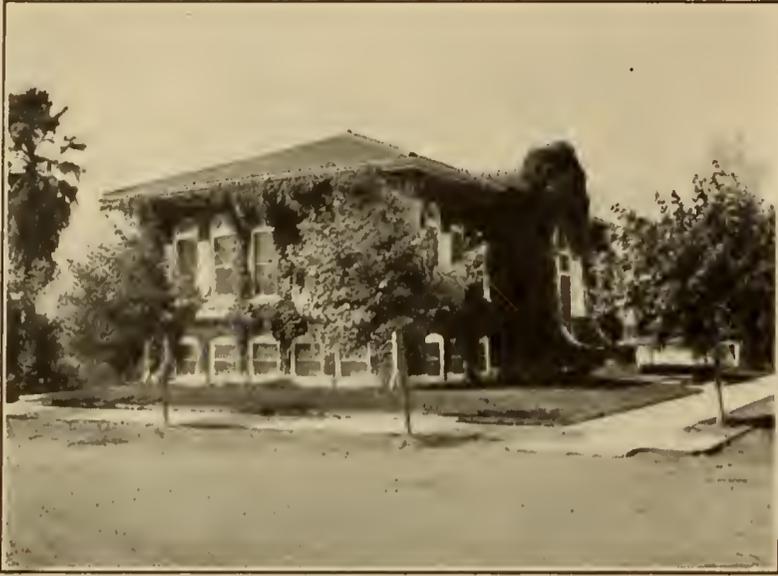
Pacific Gas and Electric Co.

P.G. and E.

"PACIFIC SERVICE"



LIBRARIES—ANCIENT AND MODERN



Public Library., Oakdale, California
Davis, Heller & Pearce, Architects

HISTORY tells us of the wonderful library that existed at Alexandria during the pre-Christian era. Modern history informs us of the University of Louvain and the wanton destruction of its priceless volumes.

So it is that in every progressive community, the public library represents the crystalized ideals of the communal forces.

IN this attractive hall of books of Oakdale it was but fitting and proper that W. P. Fuller & Co., products should be employed. They, too, have a record of service for 73 years, and represent the accumulated experiences of many minds, many years of endeavor to make the best paints and varnishes.

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SAN FRANCISCO
PUBLIC LIBRARY

The BUILDING REVIEW

VOL. XXI.

SAN FRANCISCO, JUNE, 1922

No. 6.

A WOODLAND GARDEN

By CLARA FASSETT

In Marin County, at the foot of Mt. Tamalpais trail, is one of Nature's beauty-spots, translated from its wild state into living condition after the Japanese manner, by preserving all possible natural features—without a thought of cultivation.

This garden, known by the legend over the Tori gate at the driveway entrance as "Miyajima", is built in and around a picturesque ravine which branches off from the main valley and forms the settling for the little colony of summer cottages occupied by the owner and his family. While it is not, in the strict sense of the word a Japanese garden, it is planned as a native of Nippon living in America, and utilizing what is beautiful in our abundant forest growth, would plan it; or as an American learned in the subtle art of Japanese gardening would build, looking through Japanese eyes.

Let us for a moment lend ourselves these eyes—by so doing to get a better understanding of this ancient and perfectly developed art. In the first place, we will look toward Nature, always, for our inspiration. Yet in our reproduction of a mighty water-fall, a group of wind-blown pines, a valley or a hill,

the result will be not merely a slavish copy in miniature of some wonderful landscape, but a creation, spontaneous, living, as Nature herself might achieve if she were to turn a barren waste or tangled wildwood into a garden spot; so will we utilize the beauty that we find, trees, shrubs and all that is already growing here, selecting, arranging, eliminating the undesirable, until finally our pattern is complete, and we feel in its unity and rhythm, a soul-satisfying sense of peacefulness and repose.

As a Japanese would absolutely not comprehend the reason for uprooting a charming bit of wild growth, or leveling an interestingly irregular surface in order to make a formal garden massed with blooms, so this spot of natural beauty has been made livable without marring it, cutting down trees, or slashing off branches to make room for the cultivation of a bed of roses. As a matter of fact, flowers are a minor feature in this garden, the basic idea being restfulness and tranquility obtained by varying shades of green, the studied massing of rocks, and the placing of appropriate though not meaningless ornament.



"A CURIOUS STONE LANTERN"

Squirrels frolic here among the trees, lizards creep in and out of the rocky creek bed, spiders spin their lacy webs unmolested, and occasionally young deer wander down from the hills to gaze with startled eyes on the dwellers, instinct telling them that here they may safely wander. Everywhere is Nature treated with respect and reverence, the natural beauties conserved, and here and there enhanced by a picturesque stone image.

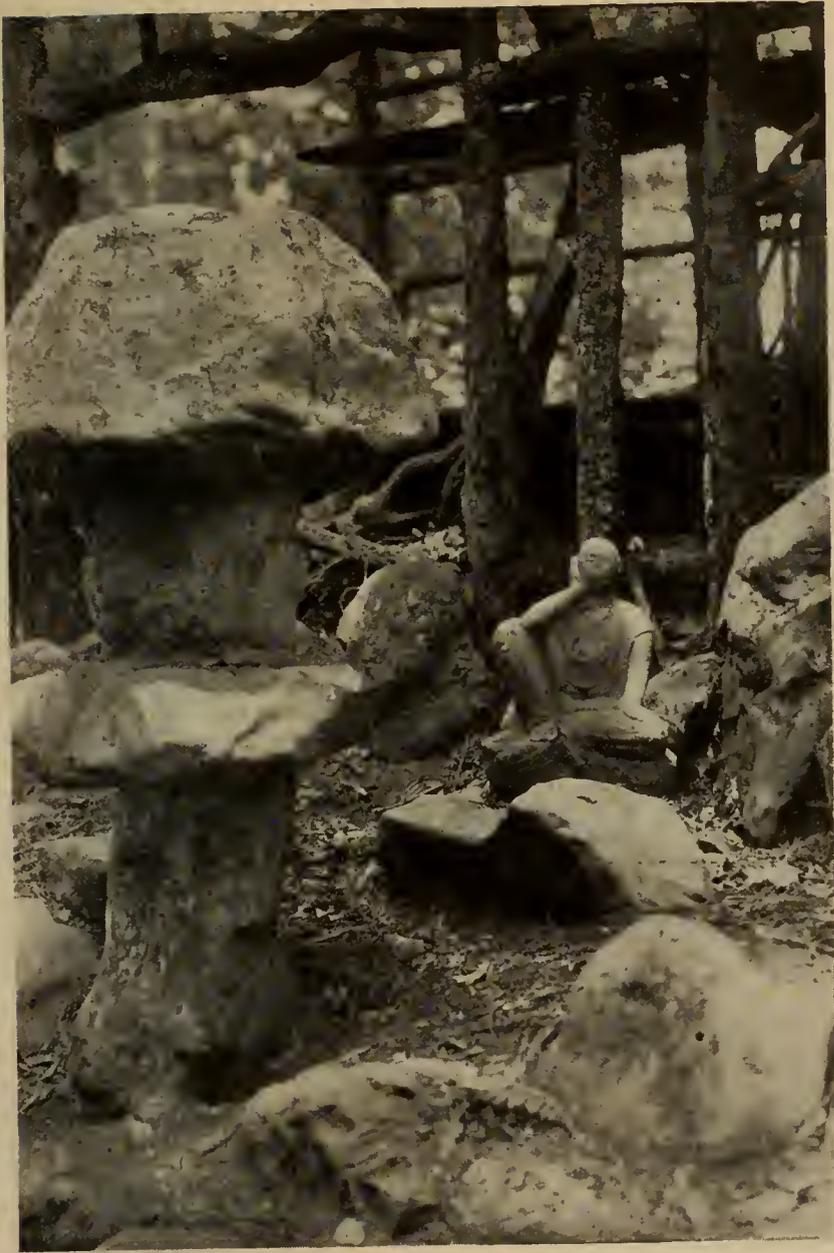
As we enter "Miyajima" through a gateway of bamboo, overgrown by wisteria of long variety, and covering great area, we do not miss the riot of color suggested to the western mind by the word "garden;" rather, we feel an aesthetic satisfaction in the play of sunlight on the various greens, toning from the pale silver of the dwarf maple and young ferns through the emerald of moss to the somberness of redwood.

Beside a pathway of mysterious promise we come upon a group of Sequoia towering many feet above our heads, the rough and

aged looking trunks forming an interesting background for an ancient *ishi-doro* or stone lantern. These lanterns are perhaps the most characteristically Japanese features in the garden. Some are of columnar form, the upper part of which holds the light, hexagonal with curved top, then there is the mushroom shape, set up on short legs with umbrella-like top. Planted on a hill-side is a porcelain lantern of more modern style—the delicate pinks and blues of its glazed surface gleam through the greenery which almost hides it—sympathetically—as though to make up for the loss of its pagoda-top. Some are of irregular form, built of water-worn boulders brought from the bed of the stream. The shelf-like part in the middle is to hold small lamps. Near a rustic arbor we find a quaint group consisting of a lantern of this type with a stone "Jizo"—god of the wayfarer or traveler; his attitude suggests an old print of a *samurai*, haughty and disdainful. This group particularly gives a feeling of hoary antiquity which is—Japan.

Crossing a foot-bridge which leads to the *besso* or residence, we observe another bit of Oriental local color in the grouping of stones about the door-yard. It would be as hard to find a garden in Japan without stones and rocks, as to find an American garden without flowers. The arranging in two's, three's and five's of these rocks, irregular and grotesque in shape, has a certain spiritual significance: the upright one in front of the door is the "Guest stone", signifying "welcome to the guest"; the group of five to the right represents "The Spirit of the House", another is known as "The Protecting Spirit of the Family."

A truly amusing object is found in another part of the garden; a grotto made of moss-grown boulders, at the base of which sits "Ebisu" the jocular little "God of Good Living", with a fish under his arm which is, I suppose an emblem of bounteous harvest, as the sheaf of wheat or horn of plenty in other lands. Notice the twisted-root formation at the back—it does not require a straining of the imagination to see the profile of a lady of



"THIS GROUP GIVES A FEELING OF HOARY ANTIQUITY"

the "Flowery Kingdom", with her elaborate coiffure and flowing kimono.

Instead of cutting down trees to secure a favorable building site the trees were left and the buildings were constructed around them. One of the cabins has a balcony overlooking the creek, and growing through the platform are three lofty redwoods—the openings in the floor being large enough to accommodate their growth for some time to come.

The *besso*, screened and shaded by shrubbery and over-hanging trees, was built by Nakatana, master builder of Miyajima on the Inland Sea, who was imported from Japan with a force of native workmen to carry out the owner's desire for a house which should be purely Japanese in construction as well as design. The building, though small is perfect in detail and embodies all that is best in this style of architecture. We admire the beauty of line and proportion and the simplicity of construction, marveling at the

way it is put together, without a nail, the joists cunningly fitted and held in place by wooden pins. In the graceful curve of the roof and the fine bit of carving over the doorway, we feel a subtle relationship to the growing green things, the waving ferns, whispering maples and stately evergreens; a rhythm of color and line, repeated, echoed from one to the other—a perfect example of "How delicately buildings may be made to fit themselves to their surroundings. In every line and mass the harmony is complete. The buildings seem almost a concentration and perfection of the hills and trees of which they seem to be a part."

After a day spent in this lovely woodland garden, we seem to get a glimpse of a subtle, elusive something, age-old yet ever young, the World-of-out-of-Doors, which is trying to talk to the Children of Men who will listen, and who speaks not only to the senses but to the imagination and to the spirit.



"THE PROFILE OF A LADY OF THE FLOWERY KINGDOM"



SOME RECENT WORK OF DAVIS, HELLER and PEARCE

By HARRIS ALLEN

The work of the Davis-Heller-Pearce Co., is evidence of the wide-awake spirit that rules so many of our prosperous country communities, a contrast to the "Main Street" atmosphere which is bad enough to read about without experiencing.

While there is a wide variety in the treatment of these buildings, a healthy curiosity exhibited in experiment with different styles and material, there is evident a general sense of fitness to surroundings. Throughout all this work the lines conform to the long level contours of the land and there is a refreshing absence of petty detail and meaningless ornament.

The McKinley School is designed in a simple English Gothic style, faced with paving brick in wide variation of color and trimmed with precast stone of granite color. The roof is laid with asbestos shingles in three colors. All sash are steel. The building contains 18 class rooms, an assembly hall, kindergarten, and large covered play ground between the U shaped wings.

The Hughson High School is built of special rug face red interlocking hollow tile

trimmed with terra cotta colored cement plaster, with steel sash. It contains four class rooms, science, commercial, home economics and music rooms, an auditorium, offices and cafeteria.

The Denair High School has walls of selected common brick, laid on "Ideal Wall" fashion, with a shingle roof. It has seven class rooms, domestic science room, library, assembly hall, offices and rest rooms.

The Denair Grammar School is faced with a buff rug face brick with roof of crushed brick, and has six class rooms, offices, library and auditorium.

The Oakdale Grammar School has brick walls plastered in a cream color, tile roof and pink cast stone entrance. It is a V shaped plan, with five class rooms, offices and covered play grounds between the wings.

The Manteca Union High School is to be also of brick plastered, with pink cast, stone trim, with a roof of small Spanish tile greatly varying in color. Besides the main floor plan shown, there are domestic arts rooms, shops, etc., with showers and dressing rooms under the gymnasium-stage. This is

so arranged that basket ball and other games can be played in full view of all auditorium seats, which, including the balcony, accommodate 1200 people. Future extensions will provide swimming pool, athletic field, bleachers, and added class rooms and shops.

The two library buildings are modest but attractive, of brick with tile roofs and finished inside with oak.

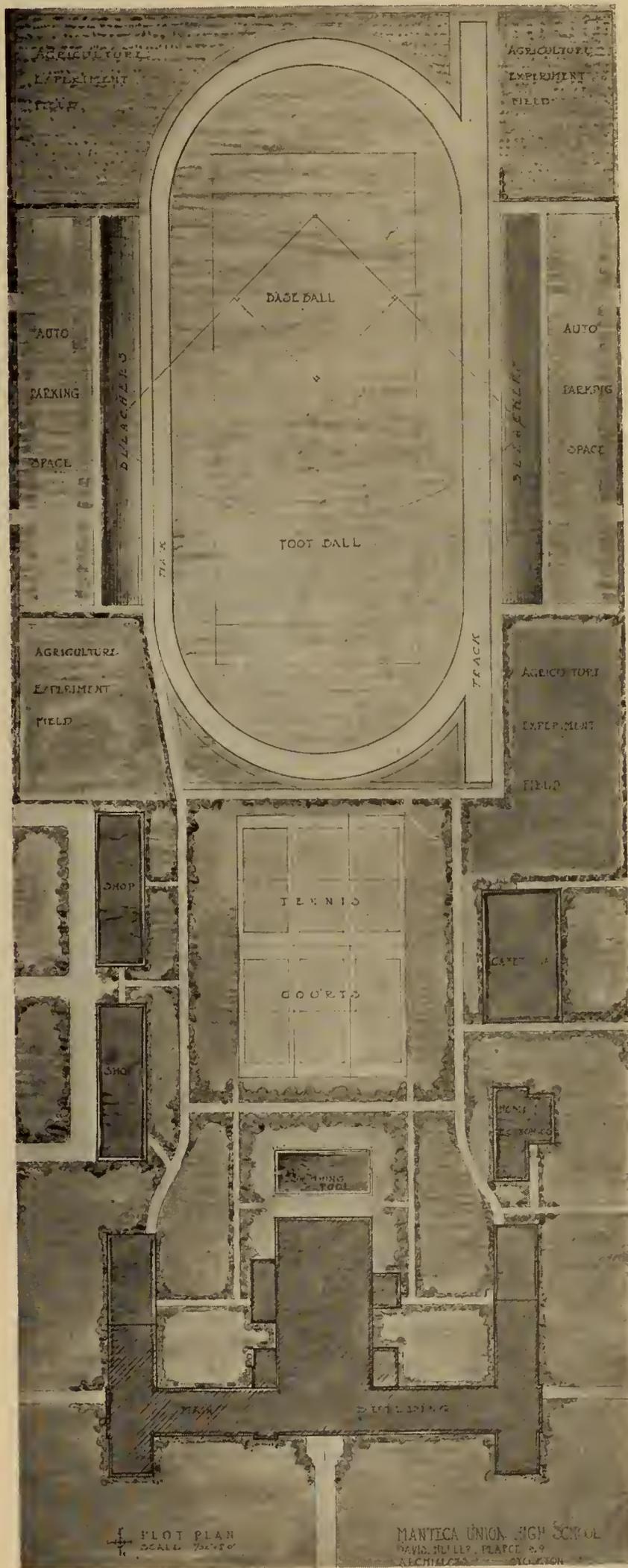
The Presbyterian Church comprises what might be called a modern religious "plant", covering under connected roofs all the necessary departments, auditorium, chapel, Sunday School Department, club, social and living rooms. The materials are simple; nothing has been forced for effect. The exterior brick (and some exposed interior brick) is hand moulded, laid with wide flush mortar joints, and after laid will be washed with a thin wash of "Minwax" waterproofing, gray in color, but with the red of the brick showing through, to give an effect of age. The plaster in the auditorium is to be hand trowelled.

The Heller and Pierce houses are built of hand-moulded red brick burned eight hours longer than usual, laid on edge with wide white flush joints, making a hollow wall. The shingle roof is laid irregularly with rounded edges, in a pleasing suggestion of English thatch. The interiors are simple but interesting; heavy beams with wood panels support the upper floor and constitute a ceiling for the main rooms below. The moulded casings and base are set flush with the plaster, with back board to cover the joint. Bath room floors and wainscot of red quarry tile give a pleasing contrast to the white china fixtures. The rooms are large and well arranged, with no waste of space.

The Scott residence has stucco walls and is almost completely surrounded by porches. During the warm days that favor Stockton, one can imagine the comfort of the large, cool rooms opening to these wide, airy verandas.

These buildings show a vigorous imagination and careful study of the use of materials.

This firm is finding its hand, and may be counted on for good work in the future, which will undoubtedly show continued growth for Stockton and its environment.



MANTECA UNION HIGH SCHOOL

THE TALL BEARDED IRIS FOR CALIFORNIA*

By SYDNEY B. MITCHELL

Successful gardens must in great measure be made up of easily grown plants, that is to those adapted to their surroundings. From the whole wonderful and varied iris family, not all water lovers, I have elected to talk about the tall bearded ones, or pogoniris. Of this section the purple and the early white are the only representatives commonly seen in California. Many more beautiful varieties are now available in colors such as lavender, lilac pink, blue, purple, red and maroon, bronze and innumerable blends and combinations.

Their culture is simple. Plant the fleshy rhizomes just below the surface of the soil. The best months to do this are from June to October, but if necessary it may be done any time. Avoid, if possible, doing it in early spring, as the shock may then prevent blooming that season. If planted during the dry season, water well two or three times at intervals of ten days to stimulate growth. Note especially that these iris prefer a dry, sunny situation, and seldom bloom well under trees. They enjoy lots of water during the growing season—October to May—which, fortunately corresponds to our rains. Established plants can get along with little or no watering through the dry summer, for their natural situation is on dry, sunny slopes, never wet places. If they have any likes in soil, it is for a fairly stiff loam with lime in it, but they are not particular. Fertilizing is not generally necessary. If it is done, use rotted manure dug in well below and out of contact with the rhizomes. Bone flour hoed in is good. Divide clumps every two or

three years where more plants are wanted, otherwise leave them alone until poorer or fewer blooms show that they are too crowded.

Their first cost is the only one, for under our conditions most varieties increase rapidly and only where an immediate effect is wanted need many roots of one variety be bought. Many of the very best kinds, all but the recent novelties, can be obtained at from 25 cents to \$1. Novelties are only expensive because stock is scarce and because the grower who raises new varieties from cross-bred seed often finds only one in a hundred worth naming and growing on for distribution.

Their best use in the garden is when massed by themselves, preferably in clumps of one variety, all so arranged as to harmonize in color. The part of the garden allotted to them will be a wonderful sight in April and May and thereafter is best not too prominent. Even when out of bloom their foliage is cleaner and greener than that of most plants.

As cut flowers they excel, for many of the more complex colorings are best when seen close at hand. They last for many days in the house, unopened buds coming out nicely in water.

In conclusion I would draw your attention to the recent great improvements in larger and more flowers on fine, widely branched stems, as seen in such varieties as Alcazar and Caterina, to the richness of such colorings as Edouard Michel and Isoline, and to the beautiful blending of colors in Eldorado and Quaker Lady, these being merely a few of the new varieties of merit.

*Courtesy of Alameda County Garden Club.



THE ENTRANCE TO THE "BESSO"

"MIYAJIMA"
A RESIDENCE IN MARIN COUNTY OF
PURELY JAPANESE CONSTRUCTION
MANO TAUSIG, PHOTOGRAPHER



"IN FRONT OF THE DOOR IS THE UPRIGHT GUEST STONE"



"ON A HILLSIDE IS A PORCELAIN LANTERN OF MORE MODERN STYLE"



"EBISU, THE GOD OF GOOD-LIVING, WITH A FISH UNDER HIS ARM"



"WE FEEL A SUBTLE RELATIONSHIP BETWEEN THE BUILDING AND THE GROWING GREEN THINGS"

"MIYAJIMA", MARIN COUNTY, CALIFORNIA
MANO TAUSIG, PHOTOGRAPHER



CITIZENS NATIONAL BANK, LODI, CALIFORNIA

DAVIS-HELLER-PEARCE COMPANY
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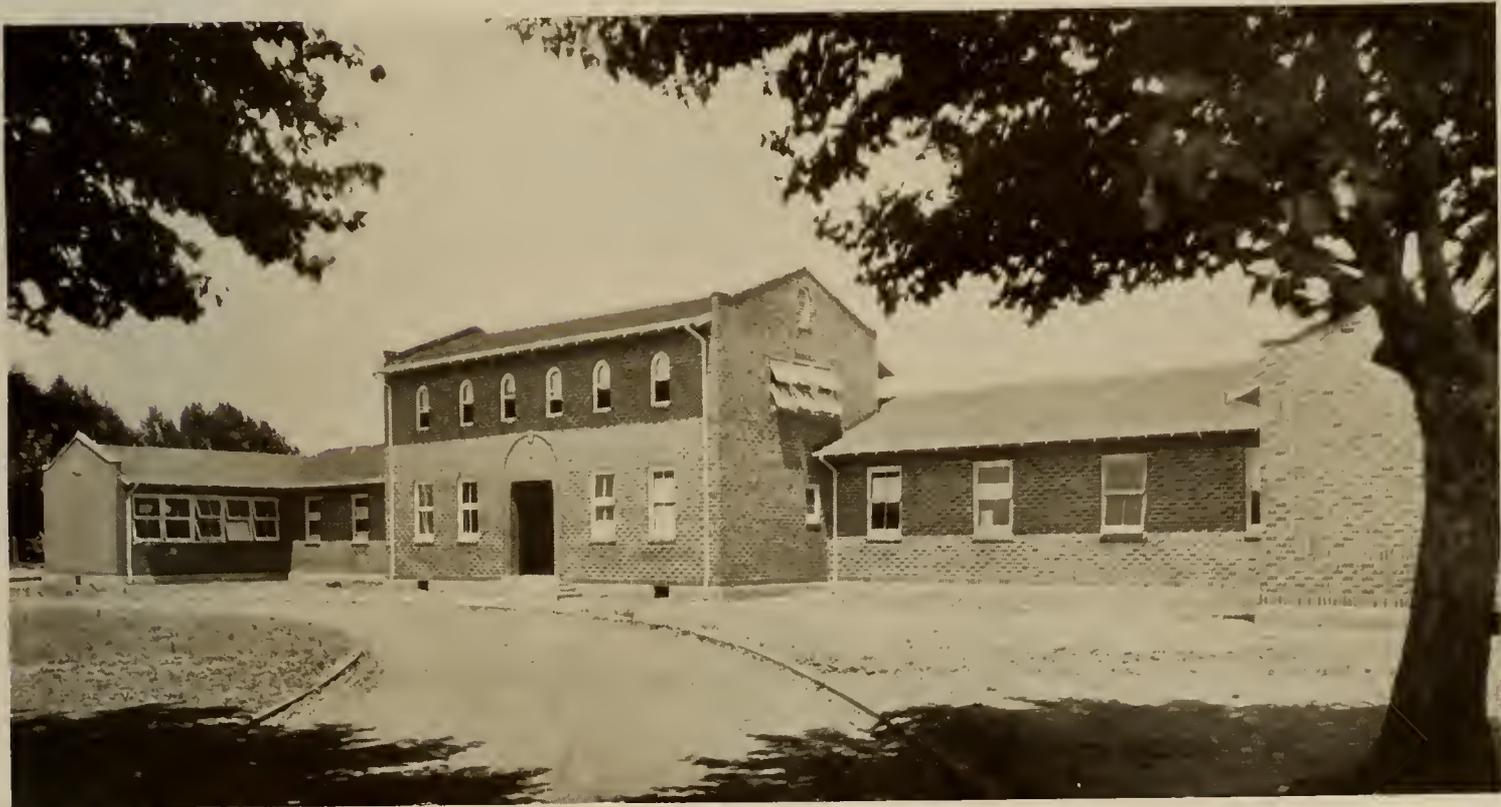
HUGHSON UNION HIGH SCHOOL



OAKDALE GRAMMAR SCHOOL



DENAIR GRAMMAR SCHOOL



DENAIR HIGH SCHOOL

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HUGHSON UNION HIGH SCHOOL

DETAIL OF ENTRANCE



DENAIR GRAMMAR SCHOOL

DETAIL OF ENTRANCE

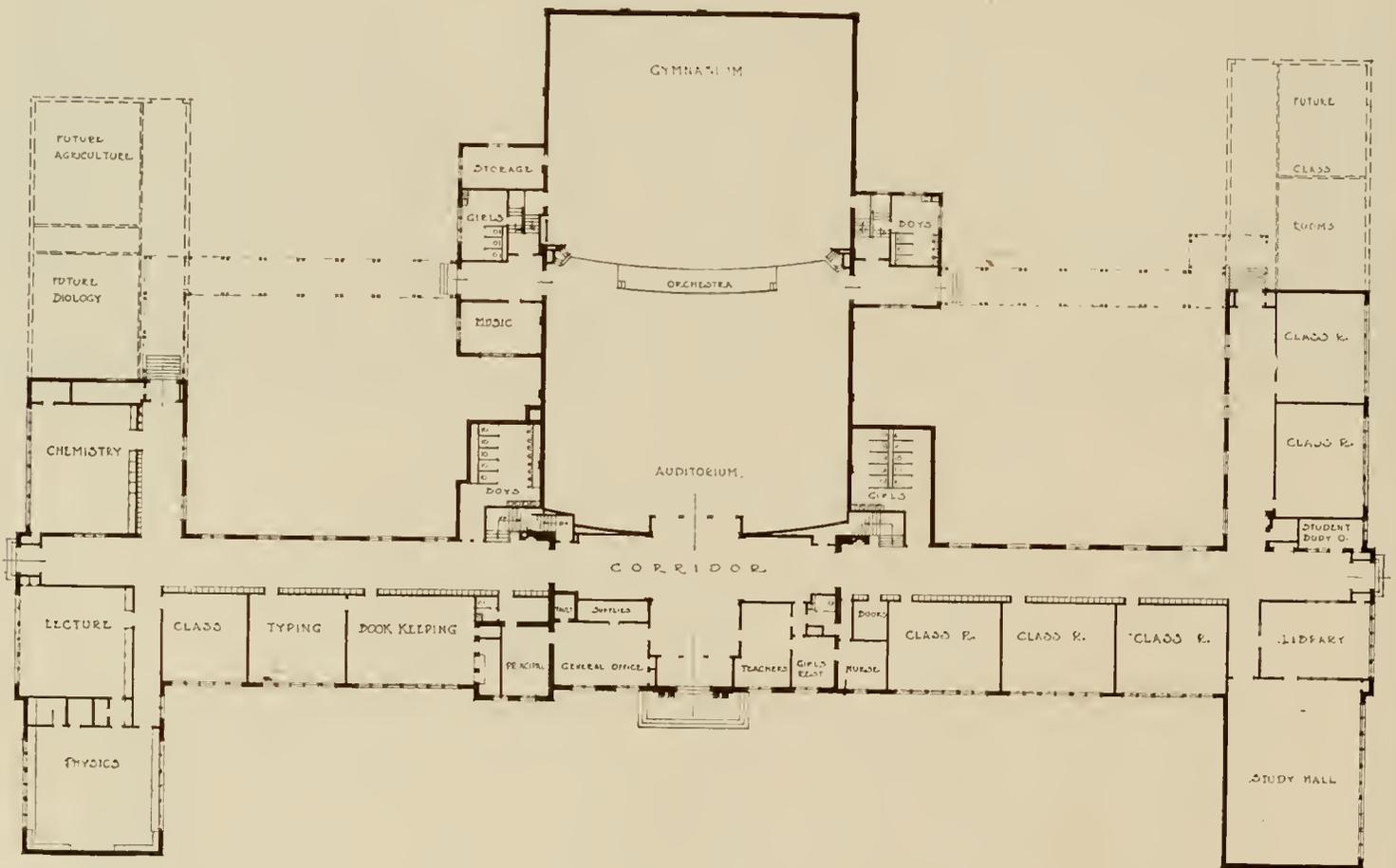


McKINLEY GRAMMAR SCHOOL

STOCKTON, CALIFORNIA

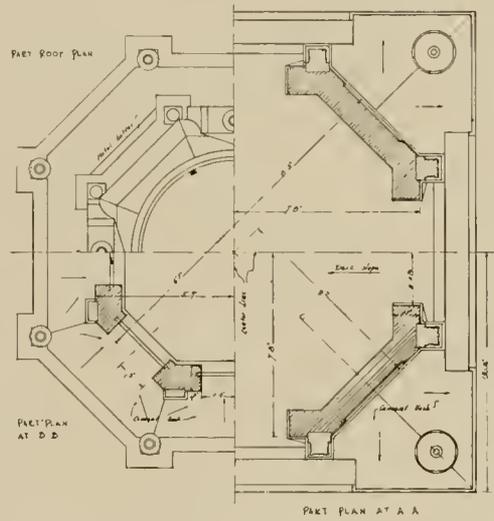
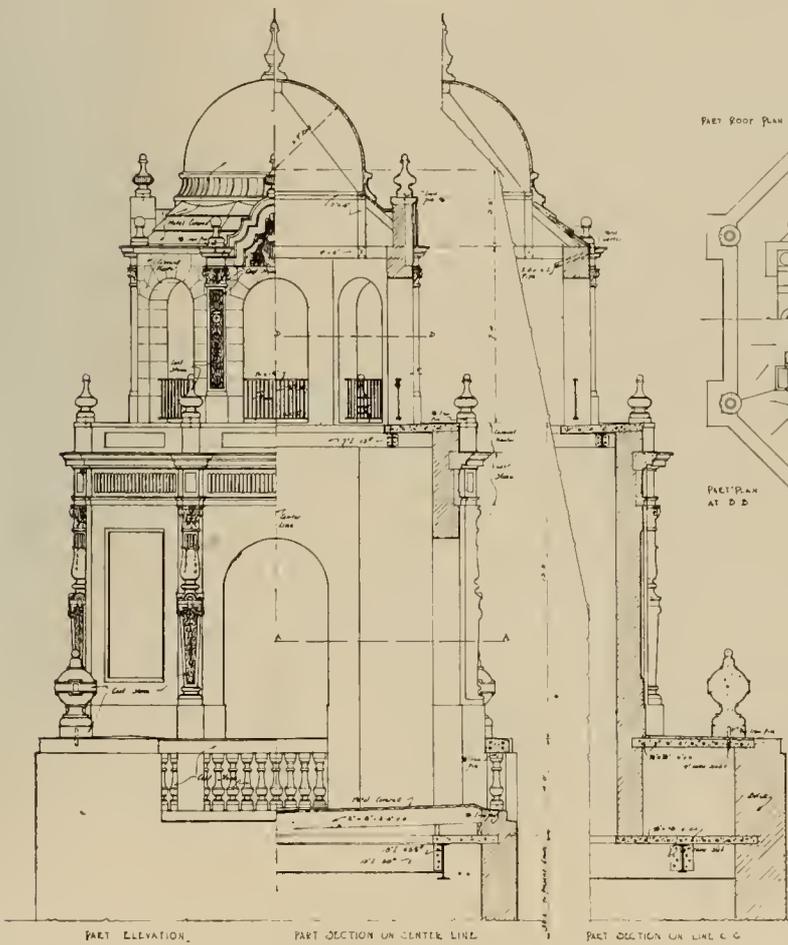
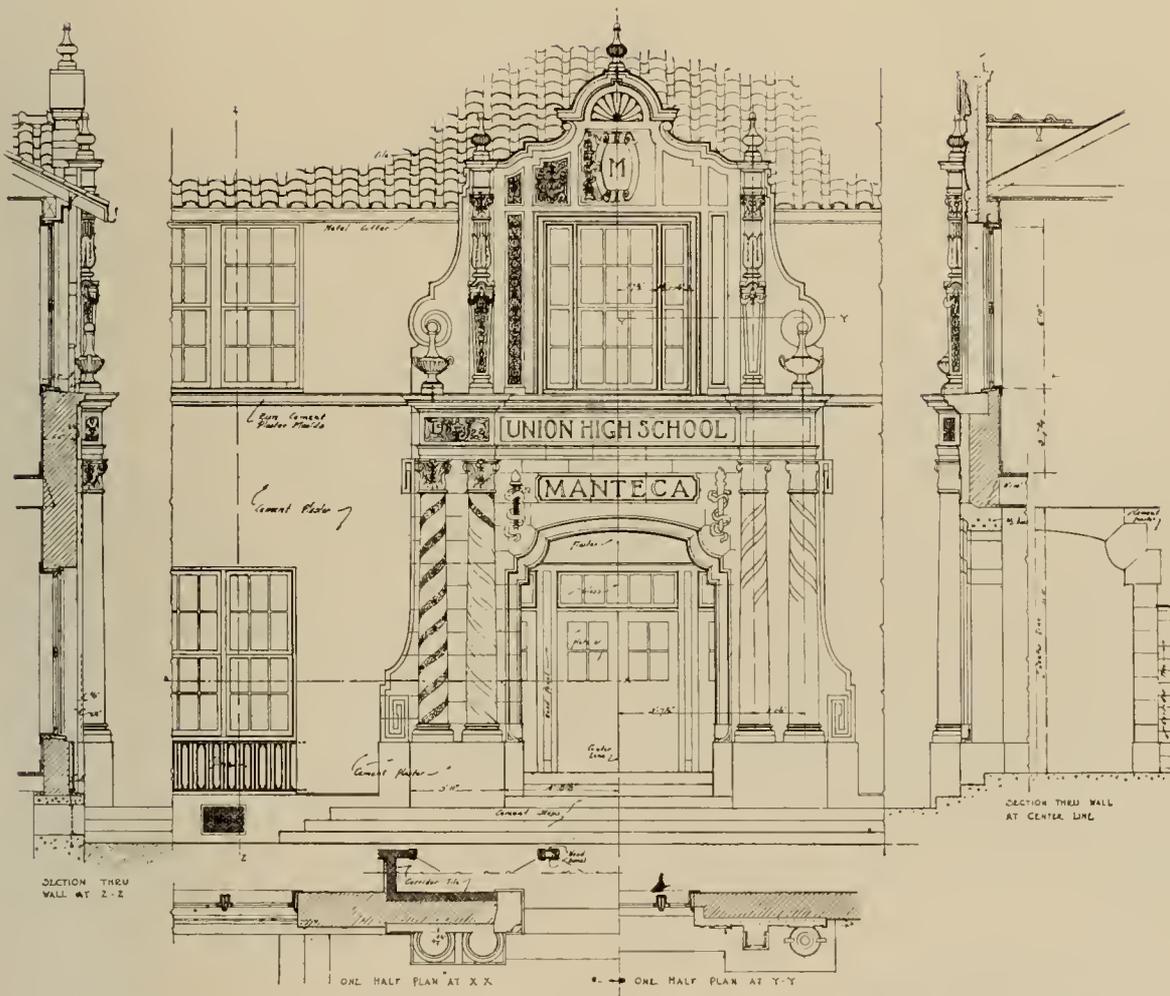


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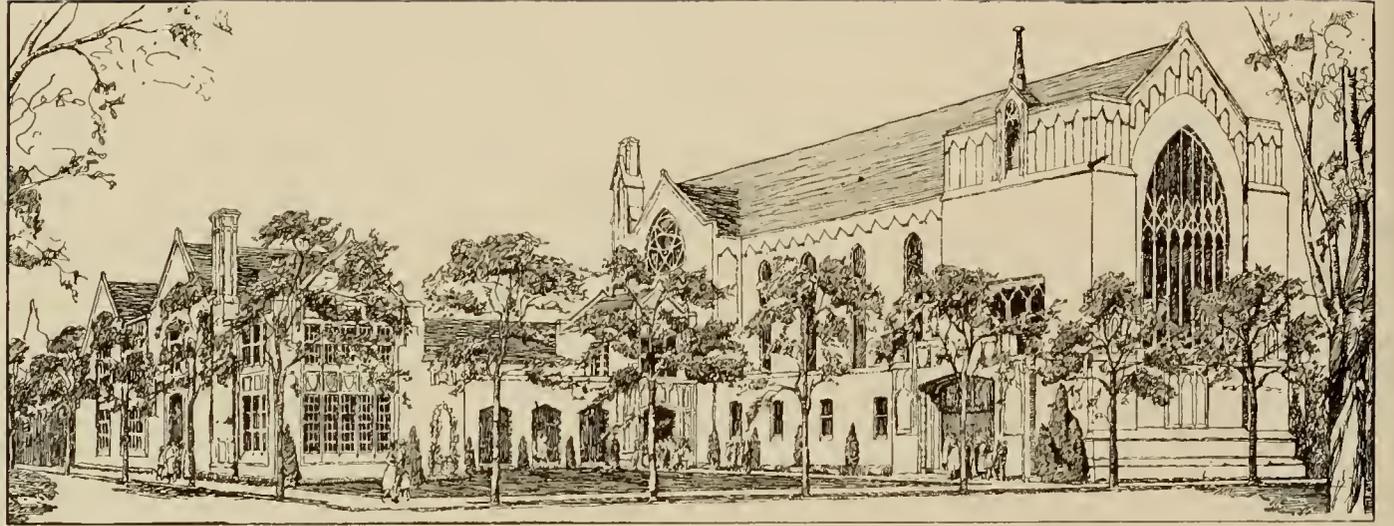
FIRST FLOOR PLAN
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MANTECA UNION HIGH SCHOOL
 DAVIS, HELLER, PEARCE, CO
 ARCHITECTS - STOCKTON, CALIF.



MANTECA UNION HIGH SCHOOL

SCALE DETAILS



FIRST PRESBYTERIAN CHURCH

STOCKTON, CALIFORNIA

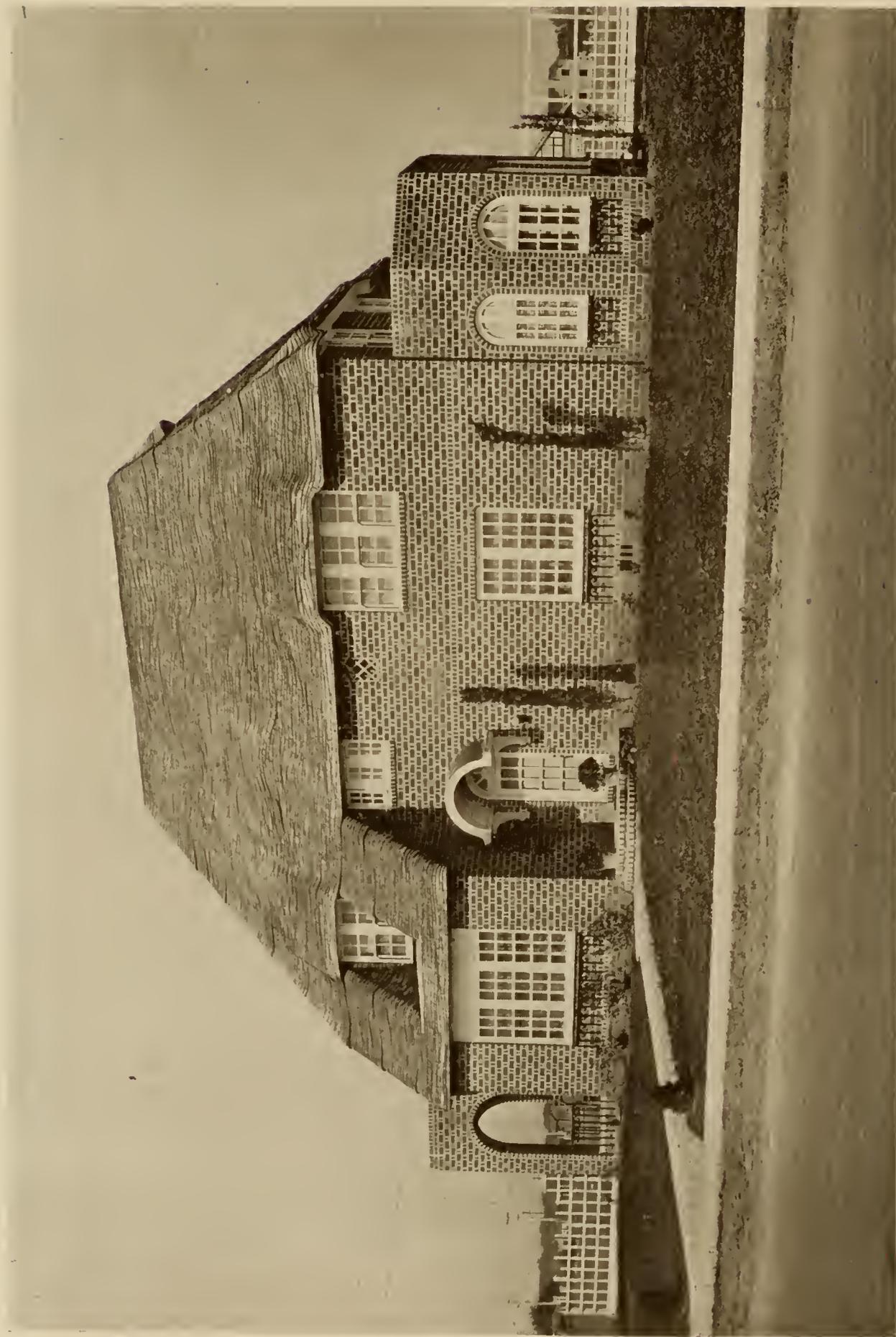


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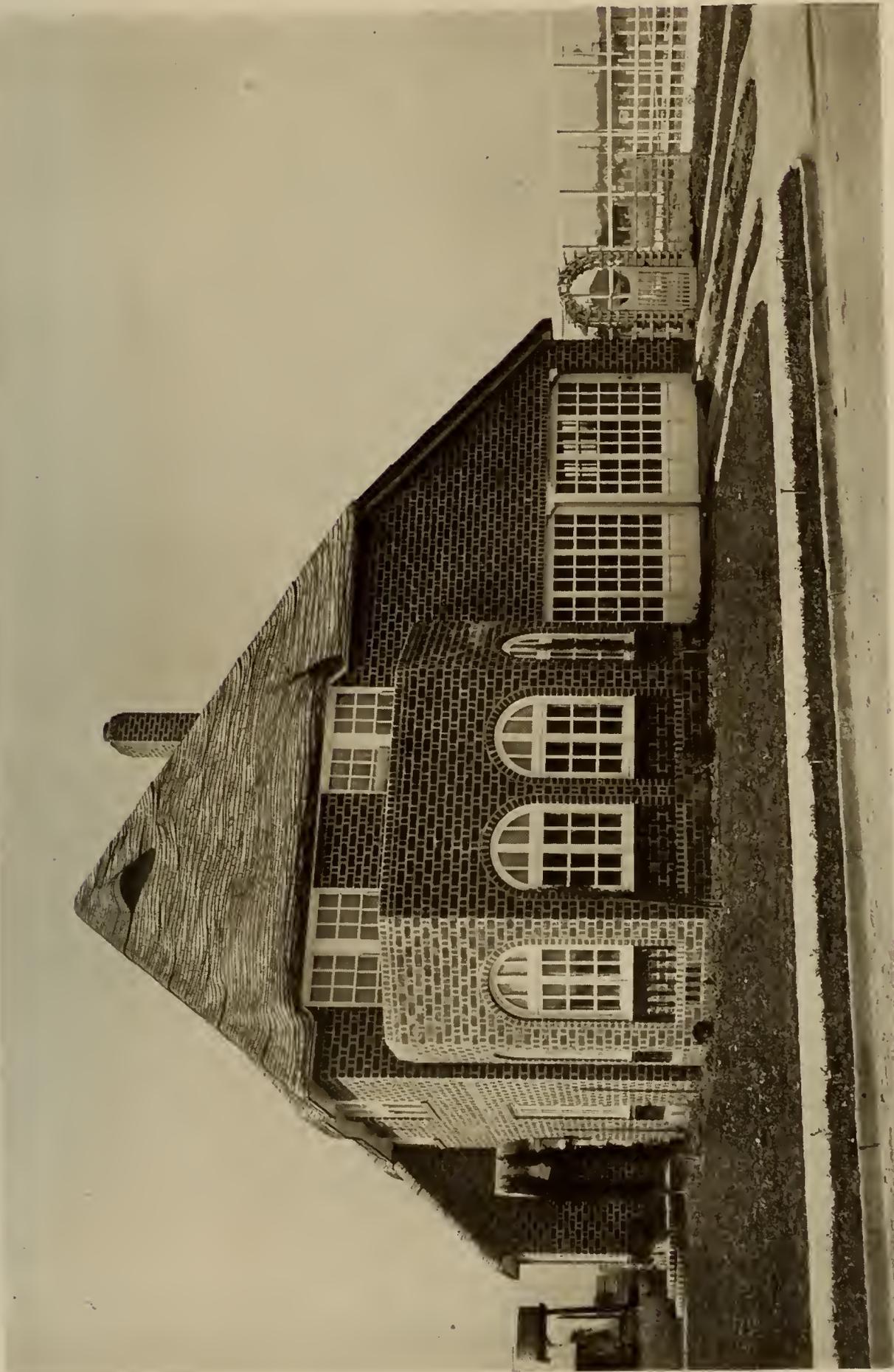
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MODESTO, CALIFORNIA

OFFICIAL NEWS OF COAST CHAPTERS, A. I. A.

SAN FRANCISCO CHAPTER

Officers

Geo. A. Applegarth, President; Ernest A. Coxhead, Vice-President; J. Stewart Fairweather, Secretary.

Directors

Henry H. Meyers, three years; Harris C. Allen, three years; S. Schnaittacher, two years; Morris M. Bruce, two years; John Reid, Jr., one year; Geo. W. Kelham, one year.

Committees Appointed for the Year 1922

Practice—S. Schnaittacher, Chairman; G. W. Kelham, E. A. Coxhead, Geo. A. Applegarth.

Education—E. Coxhead, Chairman; J. Bakewell.

Competition—S. Schnaittacher, Chairman; William Mooser, G. A. Applegarth.

Coast Chapter—J. S. Fairweather.

Legislation, Building Laws, Engineers' Council, Contractors and Zoning—Henry H. Meyers, Chairman; William Mooser, Albert Schroepfer, Fred Meyer, Geo. A. Applegarth, S. Schnaittacher.

Public Information—Harris Allen, Chairman.

Membership—W. B. Faville, Chairman; E. Coxhead, A. G. Headman.

Special subjects for discussion, or speakers at Chapter Meetings—F. Meyer, Chairman.

Chapter Dinners—M. Bruce, Chairman; Smith O'Brien, A. G. Headman.

B-B Campaign—Fred Meyer, Chairman; S. Schnaittacher, Henry H. Meyers.

Industrial Association Membership—Clarence Ward, Chairman; Fred Meyer, Arthur Brown.

The regular meeting of the San Francisco Chapter, American Institute of Architects, was held in the Architectural Club Rooms, 77 O'Farrell Street, Thursday evening, May 18th, 1922. The meeting was called to order by the Vice-President, E. A. Coxhead. The following members were present:

Harris Allen, Earle Bertz, Morris Bruce, S. Schnaittacher, W. J. Wilkinson, Wm. Mooser, E. A. Coxhead, E. B. Hurt, John Bakewell, J. S. Fairweather, H. E. Burnett, H. H. Meyers, John Norberg, B. S. Hayne.

Minutes

The minutes of the previous meeting were read and approved.

Old Business

The minutes of the meeting held March 16, 1922, ordered re-read and corrected as per delegates and alternates which should read as follows:

Delegates elected: G. A. Applegarth, J. S. Fairweather, Arthur Brown, Henry H. Meyers, John Bakewell and Fred Meyer.

Alternates elected: E. A. Coxhead, Wm. Mooser, F. J. Delongchamps.

New Business

Moved and carried that a letter be written to Superintendent of Public Instruction Woods, that the San Francisco Chapter would like to co-operate with his department in better selection of Architects for school buildings.

Committee on Small Houses reported progress, and the Chapter authorized the Chairman of Committee to prepare his report in conjunction with the U. S. Department of Commerce small house specification.

A communication from E. C. Kemper, re-instating Wm. Binder, Edw. W. Cannon and B. J. Joseph to the San Francisco Chapter received and placed on file.

A letter from the Spring Valley Water Company requesting all Architects to place a minimum service of $\frac{3}{4}$ -in. to houses received and placed on file.

Moved and carried that the San Francisco Chapter endorse the movement of the Chronicle to preserve the "Column of Progress" and that it also be replaced in same position it now stands.

Adjournment

There being no further business the meeting adjourned.

Respectfully submitted,
J. S. Fairweather, Secretary.

CITY SCHOOLS

The \$17,400,000 bond issue for new school buildings in Los Angeles carried at the special election. Of this amount \$10,040,000 is for elementary school purposes and \$7,360,000 for high school improvements. The Board of Education has announced that it will undertake \$5,000,000 of new work as soon as the funds are available, this work to be completed within one year. The building program will extend over a period of three years.

WILLIAM FAVILLE OF SAN

FRANCISCO, A. I. A., HONORED

William Baker Faville of San Francisco was elected as nineteenth president of the American Institute of Architects at the close of its fifty-fifth annual convention in Chicago. Faville is one of the best known architects in America. E. J. Russell of St. Louis and R. D. Kohn of New York were elected vice presidents, while E. E. Waid of New York was selected as treasurer and William F. Parker of Boston as secretary.

EDITORIAL

The recent conference between the Board of Directors, American Institute of Architects, and the representatives of the Building Material Producers of the United States, was of great potential importance.

An enormous amount of time and money spent in advertising materials is largely wasted. The public, of course, eventually pays for this, as the ultimate consumer.

Improvement of the present conditions would accomplish two objects: First, the direct, immediate reduction of waste, amounting to millions of dollars yearly; second, and of greater permanent importance, the actual delivery to architects of necessary information in a usable form.

Many interesting points were brought out at the conference. The dual capacity of the architect was established, as both purchasing agent and also manufacturers' salesman. His aim is to render his client a service by advising the use of that material best suited to the particular needs. Furthermore, such purchase is of greater importance to him, the buyer, than to the seller. "To the seller a sale may mean only one sale,—a small part of his annual business,—but to you it may mean the success or failure of a building costing thousands or perhaps millions of dollars."

On the other hand, the reason that most advertising literature goes into the waste basket is because there is so much superfluous matter and because statements are so often unreliable or exaggerated.

Advertising falls into two classes; that intended to attract attention, and that meant to convey practical information for office use.

Sporadic advertising is wasted effort. In accurate advertising is destructive.

As a result of the conference various committee reports upon character, classification and size of advertising information were approved and a permanent or "continuing committee" provided for, which is to con-

sider the several recommendations, secure further data, prepare a plan and program for a permanent national joint organization, and to call a second joint conference for final decision and action.

The BUILDING REVIEW, in common with the architectural press as a whole, realizes its obligations toward the profession, the manufacturers, and the public; it welcomes the prospect of improved conditions that should result from this conference; and it stands ready to further the work of co-operation through its publication.

DEPARTMENT OF COMMERCE

Washington

RESULTS OF LUMBER CONFERENCE

The four-day preliminary conference of American lumbermen, called at the suggestion of the National Manufacturers' Association by Secretary Hoover to standardize trade nomenclature and grades, to eliminate unnecessary varieties and to guarantee and protect the quality and tally of lumber to the consumer, adjourned Saturday. With its numbers largely increased by representatives of wholesale and retail associations, of architects, engineers, contractors, and other consumers such as the railways, the manufacturers passed a number of resolutions strongly supporting a National program of simplification of practices in the industry. The conference, as a whole, also voted unanimously to accept the agency of the National Manufacturers' Association in securing properly appointed representatives of all groups interested in lumber production and conversion, with a view to the definite adoption of standardized nomenclature, grades, quality, markings and practices.

The hope of the Department in calling this preliminary conference was provision of a system throughout the country for inspection and guarantee of the quality, quantity, and grade of lumber with a view to affording all possible protection to the consuming public; that ways would be found to simplify the dimensions of lumber and secure the right proportion of lumber to different types of consumers with a view to eliminating waste, decreasing cost of distribution; and to see that agencies for accomplishing these purposes should be set up by the lumber industry itself.

The Secretary of Commerce proposed that a National system of inspection and certification should be created by the industry to embrace all of the lumber trade; that descriptions of the different species of lumber as to grade and quality should be made as uniform as possible throughout the country; that the inspection service should be open to consumers in settlement of all disputes; and that, in order better to establish the reputation of American lumber products abroad, this system of inspection and certification should be extended to for-

(Continued on page 66)

INDUSTRIAL

Stockton, "The Gateway City" which is Rapidly Becoming one of Northern California's Most Important Industrial Centers

In Northern California there is but one point where all three of the great transcontinental railroads entering the state meet. Two of these, the Southern Pacific and Western Pacific, come from the north. The Santa Fe comes up the San Joaquin valley from the south. At this point—Stockton—they reach tidewater navigation for the first time.

Stockton is often called an industrial city. It now has over 200 industries of a widely diversified nature. Several of these are among the most important on the coast. All of them have been attracted because of the advantages which Stockton offers from the manufacturing viewpoint, for like the remainder of California, efforts in the development line for the past seventy years were largely directed toward populating our state with tillers of the soil.

The results of these efforts have been highly encouraging. San Joaquin County is today the fourth ranking county in the United States in agricultural production. The value of its crops now exceeds \$40,000,000 each year. In 1910 the population was but 37 per square mile. It is now better than 54 for the same area.

Manufacturing has developed because conditions have been favorable and not because of any particular effort that has been directed to obtain it.

High freight rates and a large market for their product have turned the eyes of Eastern manufacturers to the California field and the next few years will no doubt see a big industrial development.

The geographical position of Stockton is a big asset. Because of its place at the head of tidewater navigation and its commanding position to the San Joaquin Valley and Mother Lode territory it is truly "the Gateway City." By looking at the map of California, it can be seen that Stockton is the most centrally located city in the state. It is almost equal distant from the two extremities of the great interior plain, Red Bluff on the north and Bakersfield on the south.

No city in California is better situated in regard to rail lines. They approach from every angle, numbering ten in all. In addi-

tion to the transcontinental railroads, Stockton is connected with neighboring points by three interurban lines and one branch road.

Improved highways radiate from Stockton to every point in the county and form connecting links with the state highway system. The county was one of the leaders in road construction in the state, bonding originally for 238 miles of highway. This has been increased until today there are more than 400 miles of improved road.

Stockton harbor, penetrating into the heart of the city, is lined with warehouses, flour mills, lumber yards, and shipyards. Of the six miles of waterfront available more than four miles is municipally owned. There is approximately 16,500 feet of wharves. A charter provision provides that four per cent of the entire revenue of the city be set aside each year for the permanent improvement of the harbor.

A nine-foot minimum depth harbor from Stockton to the sea is maintained, the project having been completed during 1920. During the larger part of the year the depth is greatly in excess of this figure for the nine-foot minimum depth is for the extreme low water period. The tidal action in Stockton is about three feet.

Fourteen river bend cut-offs have been made in the river below Stockton which has shortened the navigable channel by nearly six miles.

Considerable progress has been made by the city toward securing a deep water channel, capable of accommodating vessels engaged in coast-wise business. The plan has been adjudged entirely feasible. It is only a question of money before the city can become a seaport through which the products of the valley can be shipped.

The extent to which the existing channel is utilized can be seen by the figures of the district engineer for the year 1920. Freight traffic for that period amounted to 692,306 tons, valued at \$42,203,211. The total number of passengers carried on the river during the same year was 242,238. Of the total net tonnage, crushed rock formed about 8 per cent; fuel oil, 7 per cent; general merchandise, 13 per cent; grain and millstuffs, 26

per cent; lumber, 4 per cent; onions, 8 per cent, and potatoes, 19 per cent.

Since the beginning of the grain industry in the state, Stockton has been the principal grain market for the interior valley. Fourteen hay, grain and produce warehouses in the city have an aggregate capacity of 170,000 tons, all being conveniently located to handle shipments both by rail and water. Each of the transcontinental railroads touch the waterfront and all maintain warehouses.

Each of the industries which Stockton possesses has been attracted because of its natural advantages as a manufacturing center. They have appreciated its shipping and distributing facilities and have recognized its enviable position among all of the cities of the state. It has never been the policy of the city to attract factories by donating free sites or by giving cash bonuses.

Manufacturers have discovered that labor conditions are favorable, climatic conditions advantageous for the operation of their plants 365 days out of the year, that it is possible to obtain an unlimited supply of water under the surface of the city, and that power rates and other operating costs are as economical as any other point in California.

In 1852 the first flour mill was established. It was the first of a great chain that today extends throughout the Pacific Coast and the Northwest. During all of these years Stockton has held its supremacy in the milling field as three large mills on the waterfront testify.

Another manufacturing plant established in 1883 has been extended to all parts of the world and its products are internationally known.

The reclamation of the delta also brought

the development of the clam shell dredger and the recognition of another Stockton industry.

The city has the distinction of being the home of the largest exclusive factory for combined harvesters in the world.

Practically all of the cardboard boxes in which California fruit is now shipped from the state are manufactured in Stockton. The Stockton paper mill, one of the largest in the west, which was established in 1918, has been completely doubled since that time. Besides cartons, the firm manufactures a paper packing case, great quantities of which are exported.

The canning industry of Stockton has been expanding rapidly and with hundreds of additional acres being planted to the various varieties of fruit in the section immediately surrounding the city the next few years will see many more plants attracted to the locality.

One of the present canneries has this year increased its pack several hundred cases over the output of last year. Ultimate plans of the company provide for the installation of six more lines, which will make the institution one of the largest of its kind in the state.

The reputation for turning out the highest standard of tanned leather in the United States is enjoyed by a Stockton firm, established in 1856. This reputation has been officially acknowledged by grand prizes and gold medals in world expositions.

One of the few window glass plants west of the Rocky Mountains is located in Stockton.

A wool scouring plant forms an important link in the city's industries. Wool from all parts of the state is shipped to Stockton for cleaning and scouring, and then re-

Established 1896

1498—Phones—2737

The LOGAN STUDIO

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STOCKTON, CALIFORNIA

shipped to various mills for manufacture into cloth.

The iron foundries and iron works are recognized to be among Stockton's leading industries. These turn out pumps, gasoline engines, plows and many other products.

There are three brick plants in Stockton, supplying not only the locality but other portions of the state with their quality product. One of these, established within the past year, is growing rapidly and adds considerably to the city's payroll.

Included in the recent additions to the industrial field are two wallboard plants. Both of these were influenced in the selection of a location by reason of the fact that they can obtain their supply of raw materials close to Stockton.

One of these plants has a capacity of from 30,000 to 35,000 feet of wallboard daily. The other has a daily capacity of 20,000 square feet of board.

Another industry is that of the Portable Wireless Telephone Company, which is to manufacture radio apparatus and supplies. A portion of the display rooms, formerly occupied by the Samson Tractor Company, have been taken over for the plant.

Cedar blocks for the manufacture of pencils are now turned out in Stockton in large quantities by one of the comparatively new industries. The firm located in the city in 1918 and has been growing constantly since that time. Its plant is modern in every respect.

Shipyards for river craft of all descriptions form a substantial part of the industrial life of Stockton. River steamers from both the San Joaquin and Sacramento rivers are overhauled and repaired at the Stockton yards. In addition there are several smaller yards.

There are two box shoo plants which furnish a large portion of the boxes used in the fruit shipments out of the county.

Numerous other products are turned out by Stockton plants. The federal census of 1919 placed the capital represented by the various industries at \$21,658,000, and the annual value of products at \$30,676,000. Both of these figures have been increased materially within the past two years. A big industrial growth occurred during the period of readjustment. With normal conditions restored a greater development can be expected.

Large cold storage warehouses for agricultural products add to the industrial import-

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ance of Stockton. More potatoes are stored and shipped from the city than any other point in California. There are also icing plants for refrigerator cars.

Three of the largest and best known business firms in the nation maintain distributing warehouses in the community. One of these is a mail order house which recognized the advantages which Stockton offers for distributing throughout California and the southwest section.

At the present time Stockton enjoys terminal rail rates, by reason of its waterway, the same as are enjoyed by those points directly located on the bay.

Bank clearings reveal the growing importance of Stockton as a commercial center. In 1915 the total just exceeded the \$50,000,000 mark. For the year 1921 business transacted by the banks was considerably over the \$200,000,000 mark. Aggregate deposits of the seven banks now total approximately \$32,000,000. There are three building and loan associations with assets of \$4,000,000.

Building permits have shown a similar gain. In 1915 the permits issued did not total 600. For the first five months of the present year the total is but slightly under this figure. The value of construction already done this year is more than that of the entire year of 1915.

Postal receipts, regarded by many as being

(Continued on page 68)



CALIFORNIA CEDAR PRODUCTS COMPANY

STOCKTON, CALIFORNIA
DAVIS-HELLER-PEARCE,
ARCHITECTS



KROYER MOTORS COMPANY

STOCKTON, CALIFORNIA
DAVIS-HELLER-PEARCE,
ARCHITECTS

TWO OF STOCKTON'S RECENTLY CONSTRUCTED INDUSTRIAL PLANTS. IN THE MATTER OF LIGHT AND VENTILATION THEY REPRESENT THE HIGHEST TYPE OF INDUSTRIAL WORKSHOP IN WHICH CONSIDERATION FOR THE HEALTH OF THE WORKER IS DEEMED A PRIME ESSENTIAL.

RESULT OF LUMBER CONFERENCE

(Continued from page 62)

ign countries. The Secretary emphasized the fact that all these ideas are being applied and are in limited operation in the lumber industry in different parts of the country, that other industries have been able themselves to establish for the use of their own members and the public such a system, and that the desire of the Department is to aid in securing the consolidation of the various organized units in the industry to the extent of establishing a national inspection and certification system, to be maintained by the industry itself, for the protection of all consumers, as well as to avoid unnecessary confusion in the trade itself. Such an organization, Mr. Hoover pointed out, would soon eliminate many current complaints by providing practical guarantees as to quality and quantity to the consumer, and the same plan would lend itself to the eventual establishment of research work by the industry for the development of better utilization of wood products, of large economies, and better adaptability in the manufacture of raw material. The plans embrace no element of control of distribution or price but essentially service on behalf of the consumer in guarantees of quality and character of lumber sold and thereby the lifting of all ethical standards in the industry. The unanimous action of this preliminary conference and the organization set up to advance these ideas by the trade itself promise success. The summer months will be employed in the necessary technical investigation in discussions in the various branches of the trade and it is expected that a final conference may be held in the early fall for creation of definite organization.

STANDARDIZATION OF BUILDING GLASS

Architects, representatives of the Bureau of Standards and other departments of the Government recently met in Washington, D. C., to consider methods to bring about the standardization of grades and sizes of window, plate, rolled, sheet and other glass. An outline was made which is intended to eliminate unnecessary sizes of glass, and to create a greater efficiency in the use of glass as a building material which is becoming more important as industrial and domestic architecture demand more light through increased window area.

Architect J. R. Miller, Lick Building, San Francisco, has formed a partnership with T. L. Pflueger and the firm will hereafter be known as Miller & Pflueger.

LEATHER RUNNERS MAKE IDEAL MATS

Thousands of useful articles are manufactured annually from what was formerly considered waste material and of little value. Nothing however has attracted more attention in recent years than the floor mats and runners made from scraps or waste pieces of sole leather.

Some ingenious person conceived the idea of cutting from these small scraps uniform blanks and having them grouped and bound together with steel wires and making them into mats and runners which are not only attractive in appearance and sanitary but practically indestructible as well. Like most inventions the leather mat had to pass through an experimental period which has resulted in great improvements not only in appearance but in durability.

The first mats made of leather and steel were necessarily rather crude in workmanship and in some ways not entirely satisfactory. About the only defect, however, that could be found was the fact that the wires on which the mats were woven would invariably bend and cause edges to curl. This tendency to buckle was of course an objection which had to be overcome before the leather mat business could be developed to any great extent.

Although leather mats with interlocking links of sole leather have been made for twenty-five or thirty years, their sale was always limited until this defect was remedied by the manufacturer of the now well-known Leathersteel Mats and Runners. These mats are made with a flat reinforcing rod which protects their ends and keeps them flat on the floor at all times. In the long runners the reinforcing rod appears at intervals of about four feet making it impossible for the edges to curl up. As a result of this patented feature, Leathersteel mats and runners have taken a very prominent place among the standardized floor coverings. They are now being used with great satisfaction in public buildings such as hotels, clubs, banks, hospitals, churches, apartment houses, laundries, railroad coaches, taxi-cabs and in fact wherever a floor covering of unusual durability combined with a pleasing appearance is required.

"HOFFITE" FLOORING PASSES SEVERE TEST

The John Bollman Co., San Francisco branch of the Liggett & Myers Tobacco Co., has recently completed a flooring test which should be of interest to other tobacco manufacturers.

Faced with the problem of installing new flooring, the John Bollman Co. decided first to make a test of several floors before selecting any one kind. Several types of floor were consequently laid and subjected to regular wear imposed upon them by heavily loaded trucks.

The test covered a period of two years, long enough to develop any defects in the flooring material. At the end of that time it was discovered that the constant passing to and fro of the trucks had made the ordinary concrete floor rough and wavy. However, a prepared floor, known as "Hoffite," showed no signs of wear in spite of the fact that it had been laid in front of the elevators over which all incoming and outgoing trucks had to pass. The test proved conclusively the superiority of this type of flooring, and doubtlessly saved the John Bollman Co. a great deal of money and inconvenience.

When the "Hoffite" floor was finally installed throughout the John Bollman Co.'s factory, a plan was devised to lay it without shutting down the factory. As the Bollman plant involves extensive floor space, a shut-down would have meant a great loss of time, and consequently the feat of installing the flooring without interrupting work is considered remarkable. It has caused a great deal of comment among manufacturers and manufacturing and scientific publications.

The John Bollman Co. idea of first testing the various types of flooring and then installing the floor selected without losing an hour's time is a distinct step in scientific factory management and factory economy. The plan of installation was devised by the Hoff Magnesite Co., manufacturer of "Hoffite."

The concern who has developed this rather new industry on the Pacific Coast and who are responsible for the many attractive and very satisfactory installations in all the Coast cities is the Pacific Leather Mat Company, 77 O'Farrell Street, San Francisco, Pacific Coast Distributors, C. A. Larson, Manager.

A N N O U N C E M E N T

J. A. DRUMMOND HAS ESTABLISHED ADDITIONAL OFFICES AT 508 DOUGLAS BUILDING, LOS ANGELES, CARRYING WAREHOUSE STOCKS. ALSO OFFICES AT 2225 FRESNO STREET, FRESNO, CARRYING CERTAIN WAREHOUSE STOCKS IN ADDITION TO OFFICE AND WAREHOUSE STOCK CARRIED IN SAN FRANCISCO. I AM IN POSITION TO QUOTE ON MATERIAL ON APPLIED PRICES.

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SOUTHERN PACIFIC BUILDING LIKE NEW

Pedestrians on lower Market Street during the past four weeks have been much interested in the activities of A. Quandt & Sons who are busily engaged in removing the weather stains from the huge S. P. Building. The massive pillars and exterior is being sand blasted and painted. The lobby will be redecorated throughout.

STOCKTON

(Concluded from page 65)

the most accurate indicator of growth, have increased 65 per cent since 1915. Business done through the local postoffice has increased to such an extent that an addition to the building is essential and the treasury department has authorized securing bids for the work.

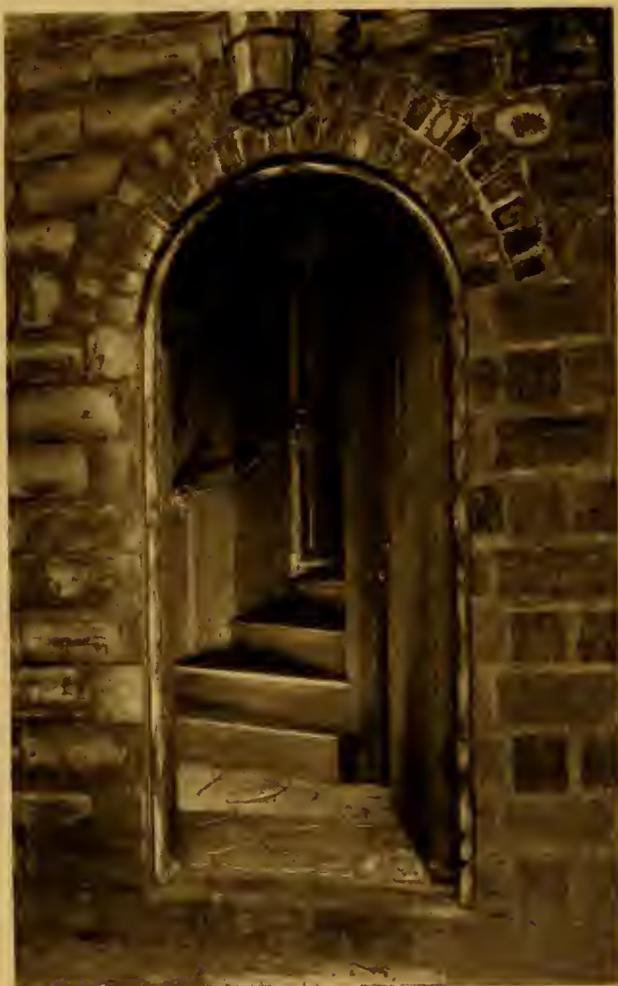
The population of Stockton is now estimated to be 50,000. The 1920 figure for the city was 40,296, but since that enumeration was made the residents of a number of subdivisions have voted to become a part of the city proper, which along with the natural growth of the community would increase that figure by ten thousand.

CONSOLIDATION OF THREE RICHMOND, CAL., PLANTS GIVES COAST ONE OF WORLD'S LARGEST PLUMBING FIXTURES INDUSTRIES.

With the consolidation, last week, of the three pottery and porcelain plants of the Pacific Manufacturing Co. and the Pacific Porcelain Ware Co., of Richmond, Calif., and the incorporation of a new company under the name of The Pacific Sanitary Manufacturing Co., with a capitalization of \$2,000,000, the Pacific Coast can claim one of the world's largest plumbing fixture industries. The new company is financed by the same people who owned the other two organizations and there will be no change in management; N. W. Stern, remaining president; M. E. Wangenheim, vice-president, and Miss F. Mayblum, secretary.

The three plants had previously operated as separated units in the manufacture of a line of plumbing fixtures, which were marketed through a jointly operated selling organization. This sales organization now becomes part of the new company. Extensive additions to the three plants are already being constructed.

THE
BUILDING
REVIEW



JULY, 1922

25 Cents Vol. XXII No. 1

Published in San Francisco



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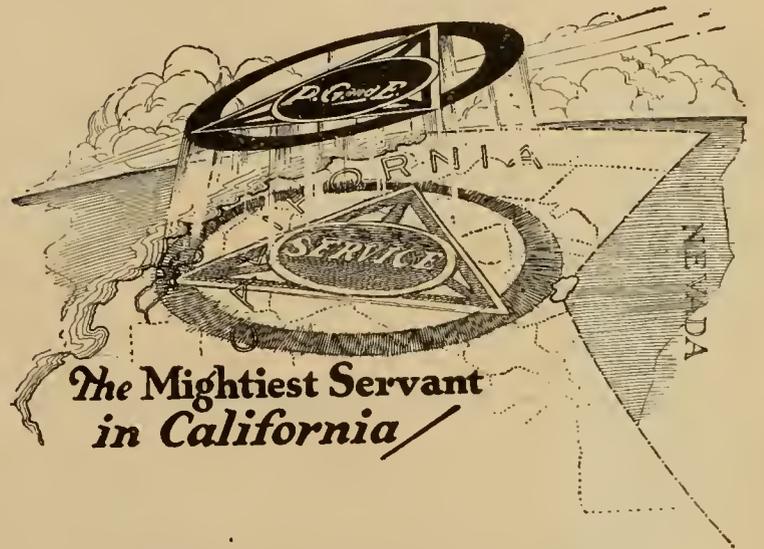
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When the Folsom plant was put into operation, it was considered "long-distance transmission" to supply Sacramento, twenty-two miles away, with electric light over 11,000 volt lines. The double circuit, steel-tower transmission line now under construction is destined to carry the power of the Pit River a distance of some 250 miles at the never before attempted pressure of 220,000 volts.

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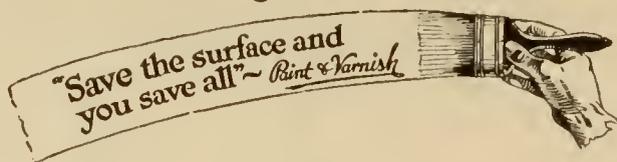
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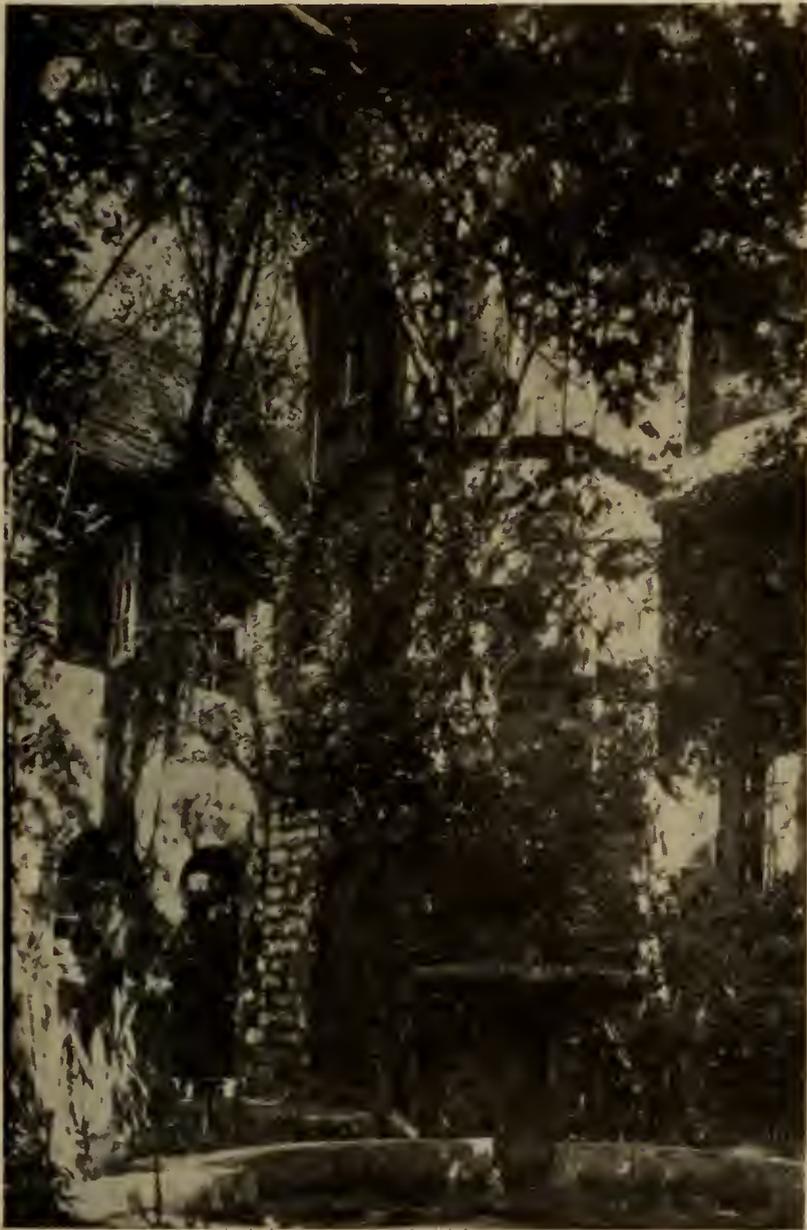


The BUILDING REVIEW

VOL. XXII

SAN FRANCISCO, JULY, 1922

No. 1



"Placed in the corner of a garden"



"The high-stepped gable"

A STUDIO HOME OF THIRTEENTH CENTURY DESIGN

By CLARA FASSETT

Occasionally it happens that a would-be home owner, with a long cherished idea of an unusual house, will join forces with an architect who has the imagination and inspiration to carry out the originator's plan with a few happy suggestions of his own, even

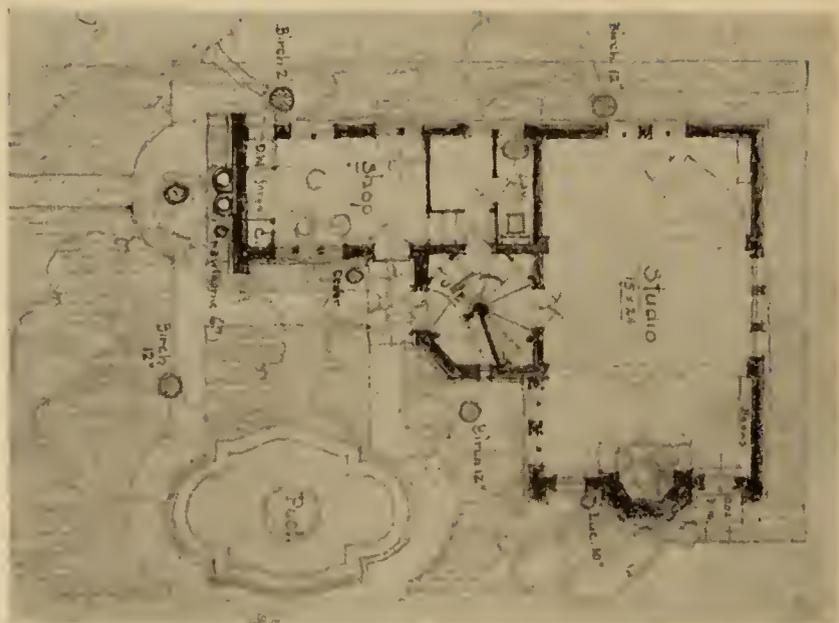
disregarding time honored prejudices and hide-bound rules which are laid down in every art, and to defy which, one needs to be sure of himself and bold. Now I do not mean to imply that there is anything particularly in defiance of precedent, or even of

the laws of unity and harmony, in constructing a house which displays exteriorly the features of a thirteenth century French chateau, while inside it is most twentieth century as to modern conveniences; on the contrary, when these two rather opposing themes are brought into harmony, with the result of pleasing the eye and arousing the interest, it should be considered an achievement.

The studio home of Mr. Digby Brooks of San Francisco is an example of how a dream-house, which has lived in the artist's mind for years, became a reality in hollow tile and timber, with the help of a sympathetic architect—Mr. Henry Gutterson.

This miniature towered and turreted chateau of Old France, of the style of the thirteenth century, represents a type of feudal architecture at its best. Introduced into Northern France by the Norsemen, it combined the essentials of a stronghold and fort with a feeling of dignity and usefulness; also it had a certain aristocratic air, a typical French spirit of lofty disdain for the merely utilitarian fortress-like qualities necessary to existence in times of war, and which in time of peace gave place to a life of "elegant leisure which fostered the arts, patronized letters, and amused itself in diversions." While this little castle lacks moat and draw-bridge, the walled-in court and other defensive parts, yet as a place of beauty to inspire the artists who live and work in it, it is a happy and fitting type of architecture for a studio home.

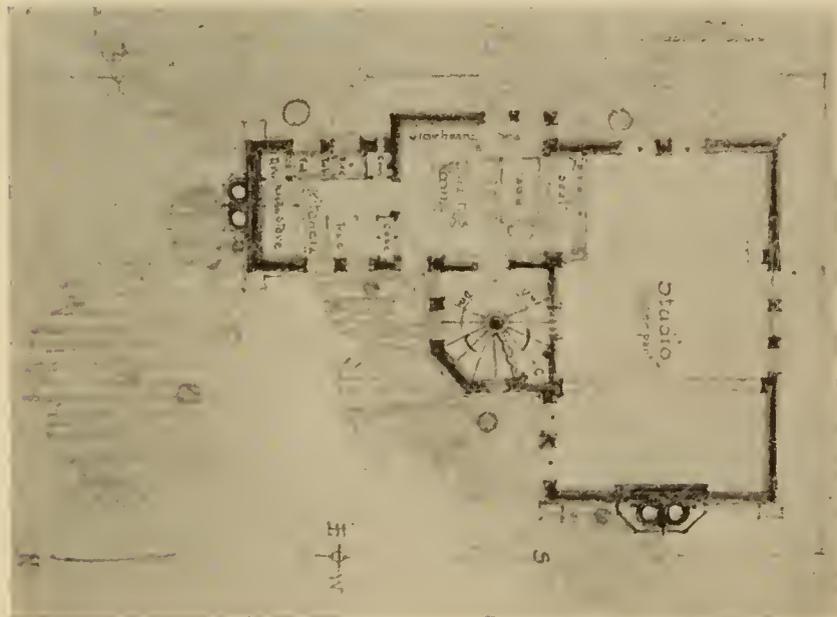
Its placement in the corner of a garden surrounded and half hidden by tall trees, English hawthorn and Japanese quince, gives a feeling to the beholder of unreality, of being transported to mediaeval France or to Fairyland. A Howard Pyle castle visualized before your eyes—or could it have been drawn in its buoyant color by Maxfield Par-

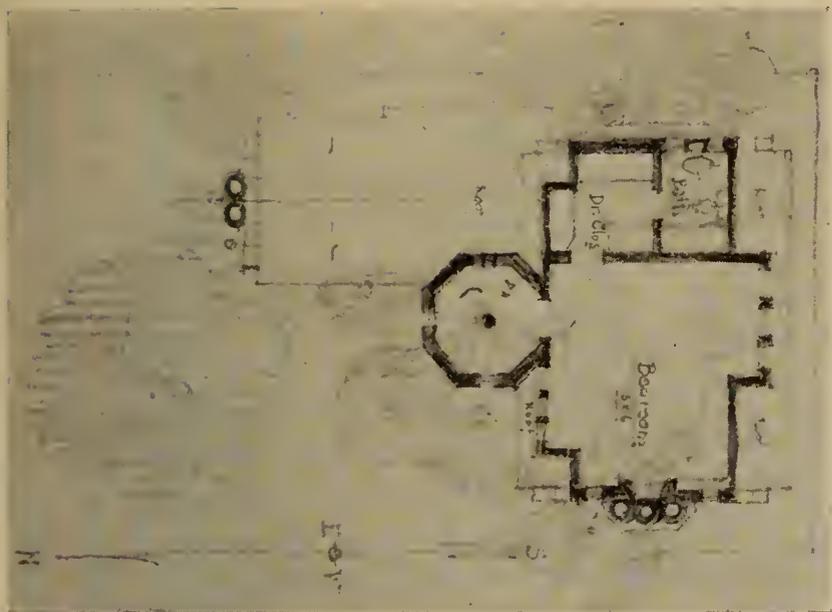


rish's brush, and, surrounded by puffs of smoke, will presently vanish into the blue sky?—a fairy dream! Or, perhaps we have come upon the enchanted "Castle of Brocillande," located, as the French version of King Arthur has it, in Brittany. But it is a very real house, and expresses delightfully whimsically the personality of its dwellers.

A real "castle" of course is never new, and while this one is less than a year old, the illusion of age is created by the "atmospheric setting"—a theatrical phrase which is most apt in describing the surrounding landscape features; the quaint garden, with fountain and sun dial forming the approach, was already there, and the birch trees that frame the tower and door-way with such seemingly careful design, had grown old before the house was built. It was simply a case of utilizing as a setting an old-time garden, with extremely pleasing effect. Therefore it does not look like a new house, but one that was built when the trees were young and growing.

The material of which the house is built is hollow tile of an orange terra cotta color, its rough surface having the appearance of hand trowelling. These tiles are put together with cement mortar tinted to harmonize in color. The roof is slate, and the flat-topped turret—a model of pre-Gothic type—is faced with redwood boarding, which looks at present a bit new, but will in time soften and blend in with the gray-green of over-hanging branches. Small as the house is, yet its silhouette against the sky when viewed from front, side or rear, presents an interesting variety of line and mass. From the front the tower and roof lines shaded by graceful birches present a most ideal composition; from the back, the chimney, which manages to look of the same age and period, is really





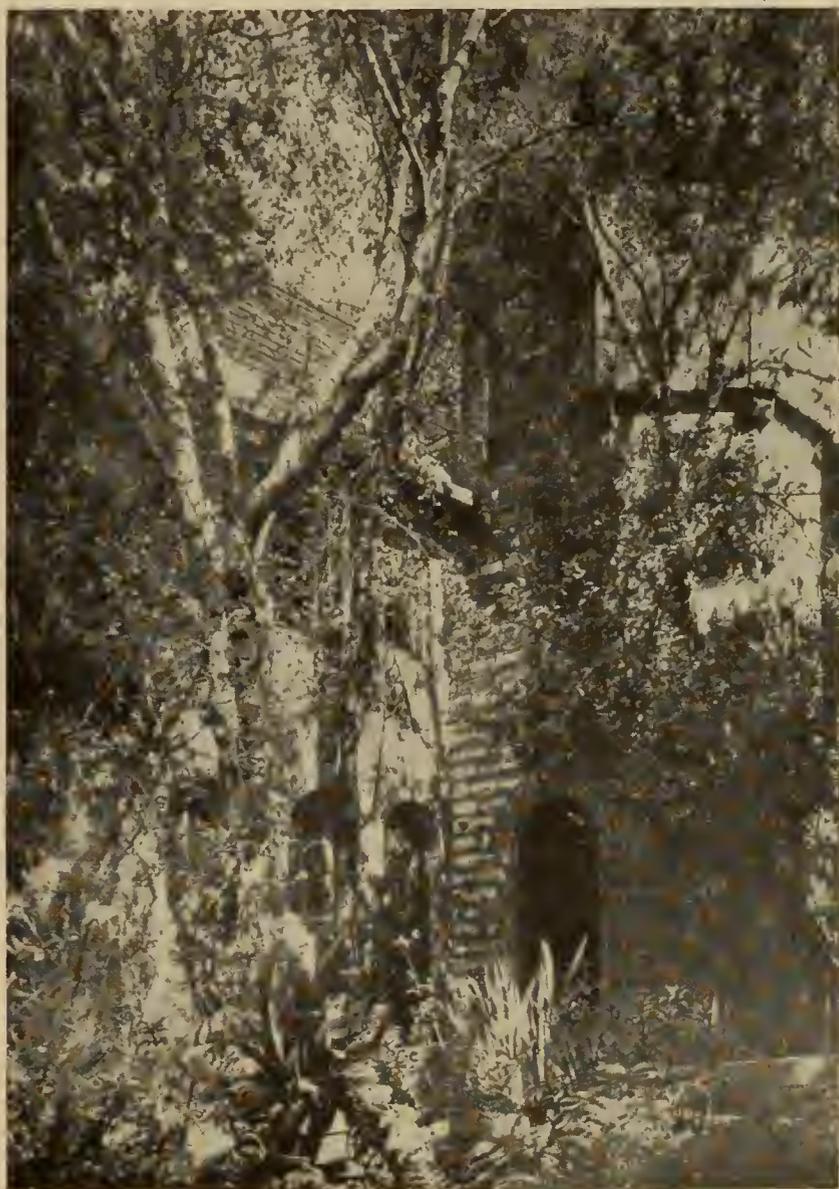
built of modern sewer pipe. A winding path of irregular cement blocks with a look of time worn stone leads to the doorway thru the tower. This tower is part of the main wing—the “donjon keep”, speaking in terms of mediaeval architecture; in the left wing, which would properly be called the “scullery”, is Mr. Brooks’ shop on the lower floor, while above is the kitchen and dining-room. The main portion consists of a music room extending the length of the house, with chamber, dressing-room and bath above.

Entering the arched doorway, which is lighted by a copper lantern of thirteenth century design, we find ourselves at the foot of a spiral stairway which leads to the top of the tower, reminding us of the gray stone Westminster Abbey stairway. The steps are of oak and newel post of Oregon pine stained greenish-gray. The hand-rail is of hemp rope attached to the wall by toggle-bolts of iron. Narrow openings which we accept so casually from the outside as windows peculiar to a tower reveal to us their true meaning when we study them from the inside. A window as a means for letting in light and air or revealing a view, was unknown to the inhabitants of feudal castles. Those developed in course of time from mere port-holes thru which to pour melted lead on the besieging enemy, to narrow slits of windows or *meurtrierés*. Beside these windows how many fair ladies have watched and waited for the jousting knight to return, victorious with banners proudly flying, or borne on a pall by his sorrowing squires!

The first landing opens on the “dining deck” overlooking the music room, and which to be historically accurate would be used as a musicians’ balcony. It is nine by thirteen feet and large enough to accommodate a small table, chairs and buffet. A

swinging door leads to the kitchen, and to the left of the door is a sliding panel, a convenience for serving. The kitchen, though only eight feet square, is equipped in the most modern apartment house style. As you stand in the center of the room, you can reach everything from that point, which as every house wife knows is one of the tests of the up-to-date kitchen; the stove must be convenient to the sink, the kitchen cabinet must be on intimate terms with the stove, there must be the smallest possible amount of floor space to clean, etc. And all of these points have been observed in this twentieth-century kitchen in a thirteenth-century house.

The music and living room strikes again the note of mediaevalism, with its high ceiling supported by rough-hewn pine rafters, its walls of the red tile unplastered. At one end is the fire-place, with over-mantle decoration an armorial panel of painted concrete; time and smoke will soften the brilliant azure field, and bring it into more harmonious relationship with its surroundings. The furnishings show a thought for modern comfort, with here and there an antique piece—a red and yellow Chinese chest, an early English



“Shaded by graceful birches”

carved settle. The high windows are undraped; in fact there is almost a total absence of textiles in the room, except for the arras hanging below the balcony, a background for the carved seat. This absence is not felt, however, because of the happy distribution of color in the walls, rugs, paintings and bits of glowing copper. We feel that drapery would be meaningless here—it would destroy the feeling of bold simplicity. A proper balance is maintained between the antique and modern, by the presence of the grand piano, cozy tea-table and really comfortable chairs, and in contrast to the Great Hall of feudal times, plenty of light through the spacious windows, and genuine heat from the wide, deep fire-place.

The sleeping room above is more modern in character, as no one now-a-days, not even the most enthusiastic collector of antiques, would care to sleep in a thirteenth century bed-room. It is paneled in grey-stained pine; the fire-place of grey stone is flanked by orange curtained windows. The built-in features—the joy of a servant-less house—consist of wardrobes designed to fit the garments which they hold, and in the dressing-room are shoe-closets and hat-cupboards.

The bath-room is reached through the dressing-room, and the feminine eye (quick to take in such details) observes two important things. One is that instead of putting the laundry in the basement—which requires extra plumbing and causes a sinking feeling in the chest every time one thinks of going down one or two flights of stairs to do a bit of washing—two small tubs are installed in a corner of the bath-room. As the owner says “in a maid-less house everybody washes in the bathroom anyway, so why not have the facilities there?” Which is a most sensible idea. The other important item is that laundry tubs and wash bowl are of a height to be conveniently reached by a normal man or woman, not planned for dwarfs or undersized people as these fixtures in most houses seem to be.

Needless to state this was a matter which required the personal attention of the builder and was firmly insisted upon.

The individuality of the owner is expressed in some interesting examples of his craft, door-plates and handles, lighting fixtures of hand-wrought copper—all in the spirit of the period and harmonizing through rich con-

trast with the prevailing color-scheme of terra cotta and grey-green.

One hardly knows after a view of this unique little “chateau”, whether he is the more impressed with the romantic appearance of the “fairy castle”, or with the ultra modern comfort and convenience herein expressed. Nothing has been over-looked in the line of labor-saving devices, from the dumb-waiter in the kitchen to the arrangement for feeding coal and wood from the outside into a bin near the fire-place in the living-room. The architect and owner working together have been most successful in bringing together and weaving into the same pattern, two elements which are almost at the opposite ends of the compass—poetic beauty and up-to-the-minute utility. Also, the construction shows a feeling of solidness and permanence, of honest, thorough and time wearing qualities. It is built too, with regard to future enlargements; the raising of the roof over the “scullery” wing is contemplated to accommodate another bed-room, and a terrace is being laid out at the side where there is ample space for lawn and flower beds.



“Plenty of light through the spacious windows”



THE ALLURE OF THE WALL FOUNTAIN

Exemplified in the garden of Mrs. Eldridge M. Fowler, in Pasadena

Designed by the Architect, Myron Hunt.

By ESTHER MATSON

Of the old Italian gardens one of the happiest features was the wall-fountain. The old masters who created such pleasaunces as the Villa d'Este, as the Villa Lante, or the villas at Frascati well know what a thrill of delight it gives one to come upon a garden wall in which has been artfully set a fountain.

Too often in America when we try to model our new gardens on the old masterpieces we forget certain of the underlying reasons why those were so full of charm. In our enthusiasm for the wall-fountain *per se*, for instance, we sometimes overlook two important points,—first the fact that the majority of those old gardens were laid out on steep hill-sites and that therefore terraces and retaining walls were matters of necessity. Secondly, the fact that the fountains which have greatest glamor are those

which the masters wrought most skilfully into the composition of the wall and that in its turn most perfectly in harmony with the landscapes by which they were environed. The most bewitching of the old wall fountains, in brief, are the ones that while avowedly artificial, architectural structures, yet seem almost as inevitable as the rocks, the trees and the surrounding hills, seem indeed to be almost as much "at home" as they.

Mrs. Fowler's happy version of an Italian garden, full as it is of varied interest, is particularly striking for the art with which its walls and wall-fountains are contrived,—first in relation to the site, and next, in relation to one another.

The garden situation is ideal, the grounds sloping eastward from the house with an abruptness that makes buttresses, terraces and stairways essentially reasonable. Just the



type which the old English garden-lover in the seventeenth century, Gervase Markham, eulogized as "exceeding beautiful to the eye and very beneficial to your flowers and fruit trees, especially if such ascents have the benefit of the sun rising upon them." This does have that benefit.

The boundary toward the street is made partly of trees and close-growing shrubs, partly only of masonry. "Perfect seclusion" is achieved in the same way that it was achieved in the old models where as Professor Hamlin noted is "no oppressive display of prison-like walls."

We all agree now that art is the embellishing or making the most of some necessity. Excuse then is not needed for the delightful arched niche in the southeast corner of this boundary wall and for the wall fountain with the endearing little bronze figure of a child leaning over a pool. The little figure gives that "human interest" about which we talk so much, while the tiny frogs set about the rim add a happy "touch of comedy."

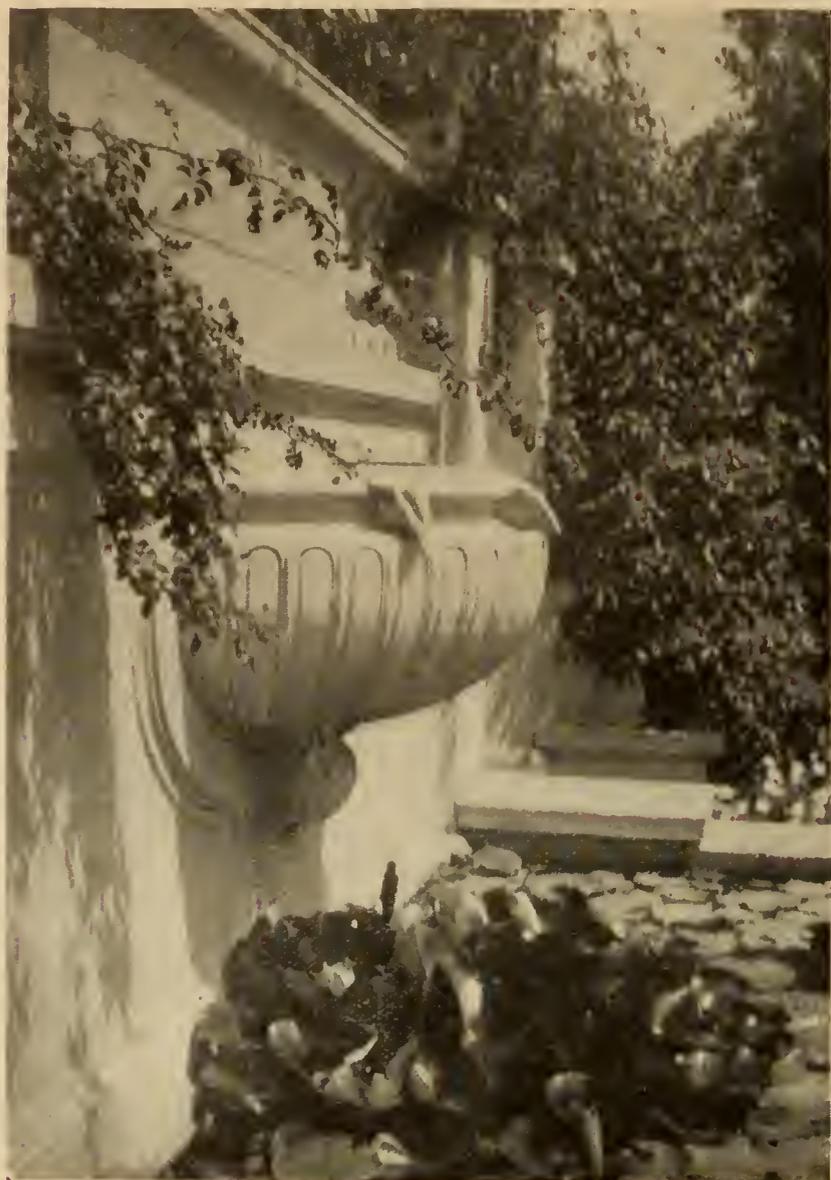
The abundance of flowers and foliage serves to set the little nook still further apart, making it a kind of shrine magically sentinelled by the tall fronds of evergreen papyrus.

Opposite, instead of a boundary wall a retaining wall was required, and this has been broken into several different units by flights of stairways, sometimes straight and stately, sometimes winding and teeming with mystery. At one point a peculiarly effective "garden-picture" is made by a wall-fountain contrived between two winders. A sufficiently generous expanse of plain wall surface is left to allow of an ever fascinating play of sunshine and leaf shadow. Above is a classic balustrade, while midway between the two flights of steps has been inset a marble water basin. Over the edges of this the drops trickle into a lower, larger basin filled with lilies.

The low pool is simply rimmed and set near enough to the ground for the many surrounding flowers to peep over into it. At each side of this unit of walling rises a pier that makes both for height and for dignity. Colorful vases resting on these piers bring in a note of reminiscence, hinting indeed at rare old majolica, but in reality proving themselves to be of California craftsmanship and well worthy of fame on their own behalf.

In old Italy as we all know, flowers are not counted among the chief assets of the

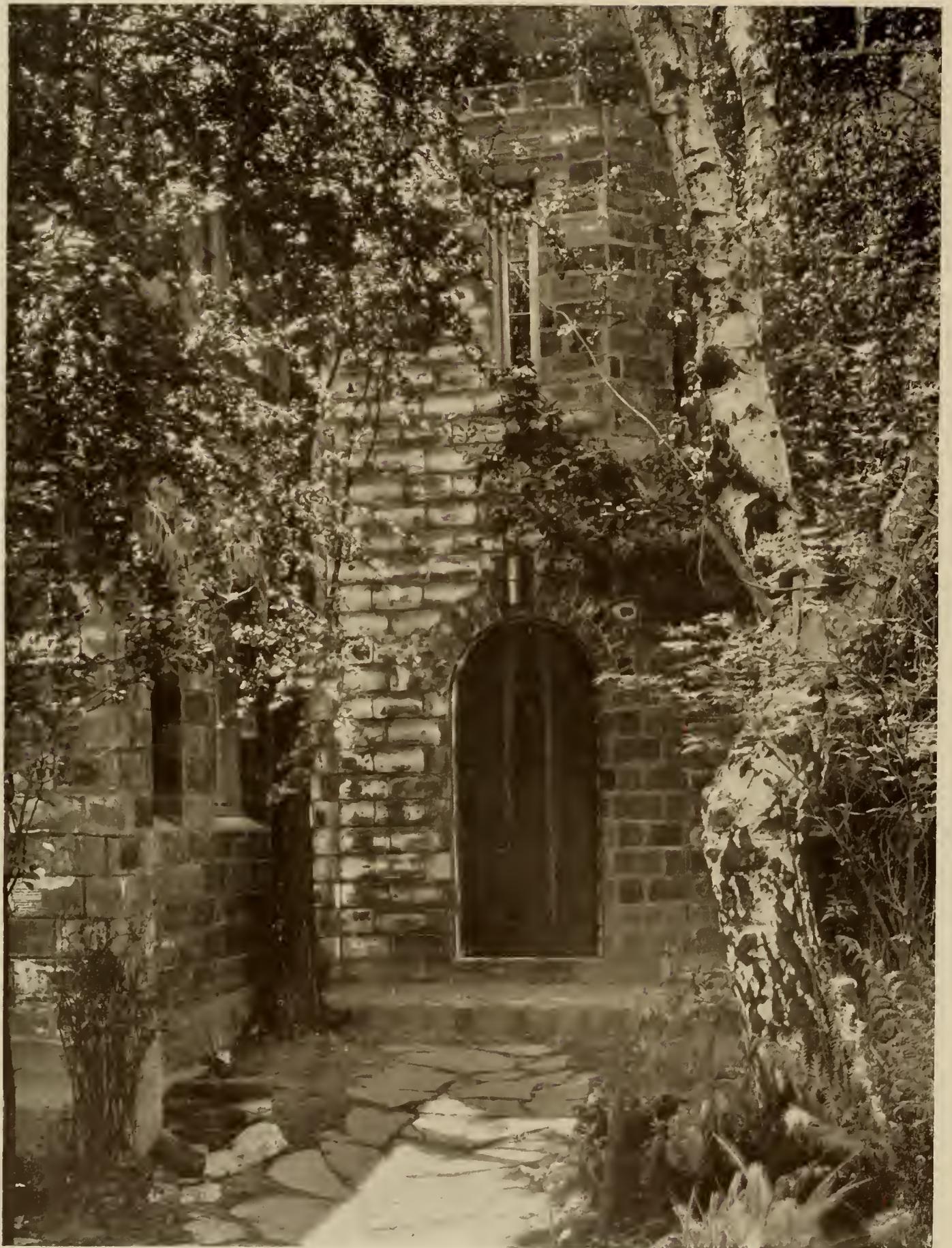
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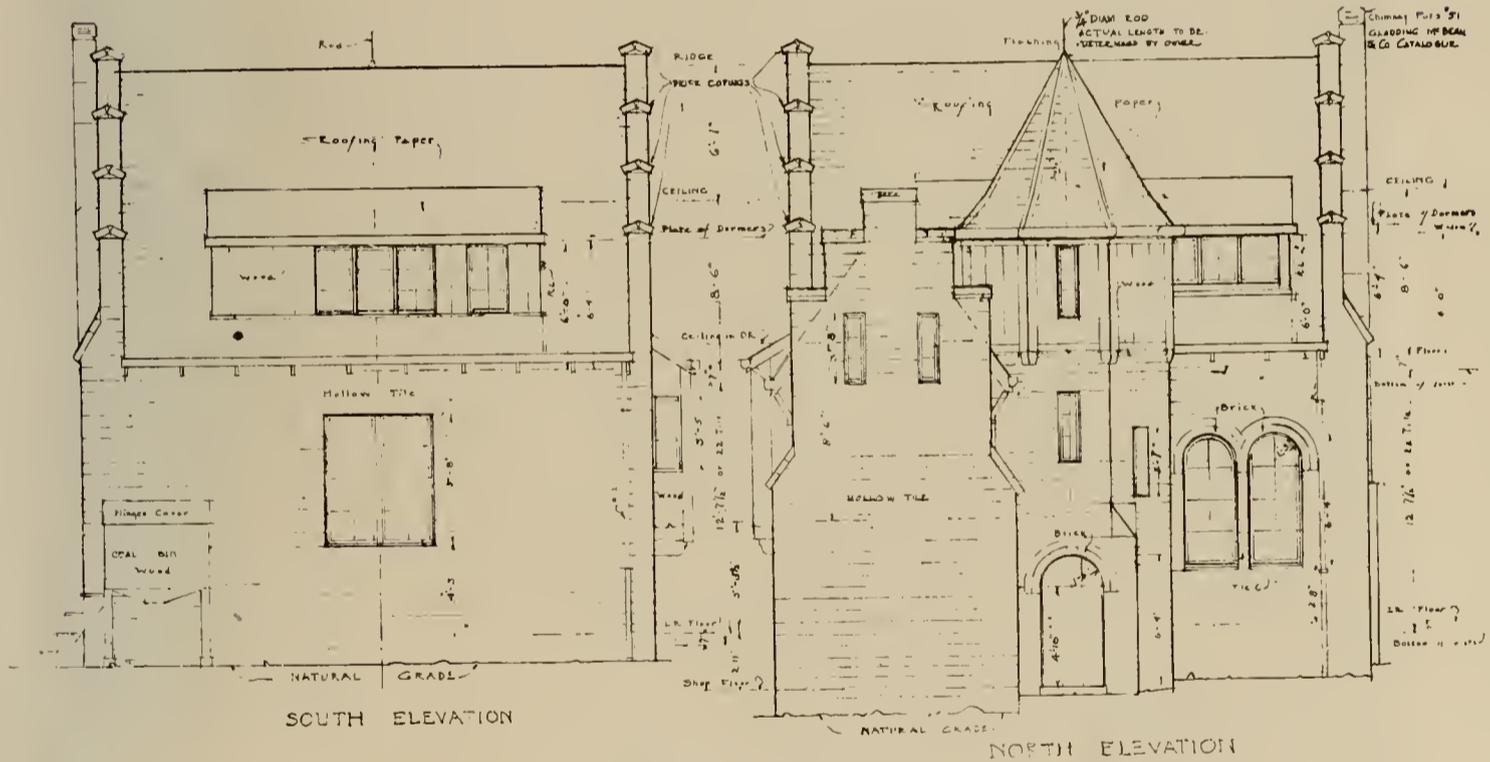
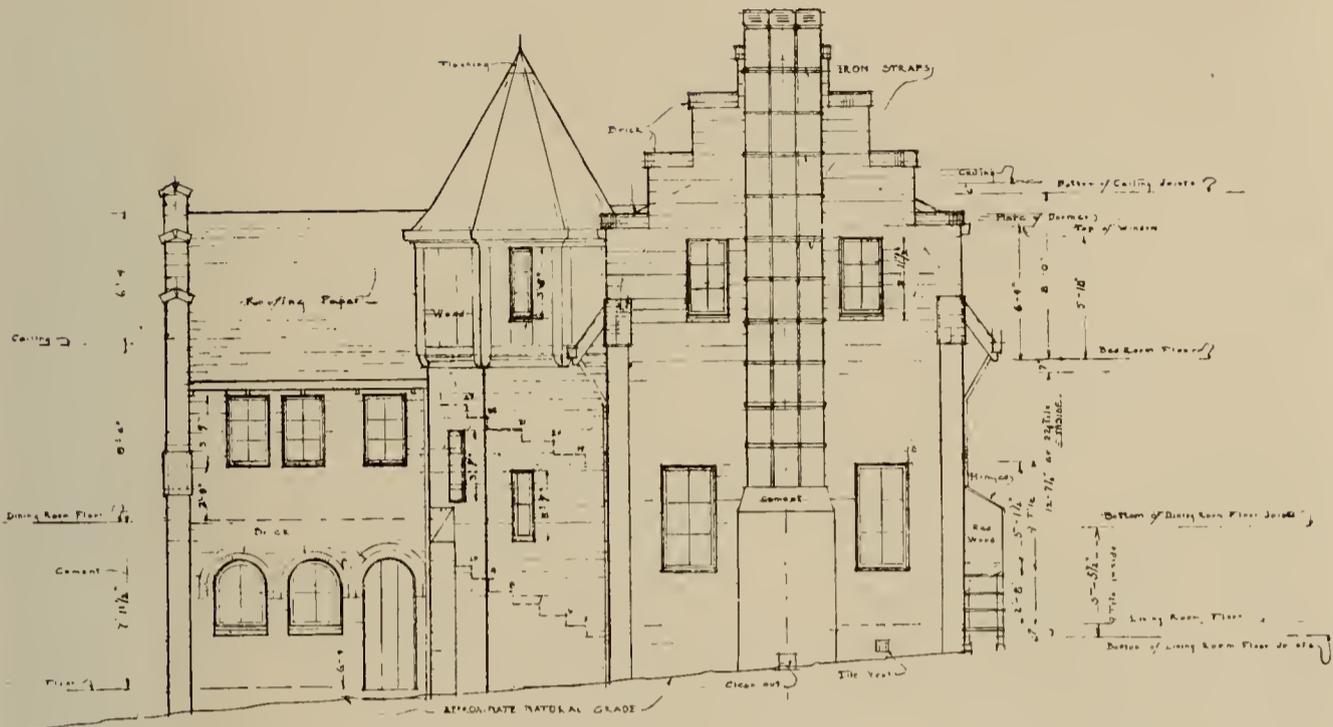
"Reminding us of the gray stone Westminster Abbey stairway"

STUDIO OF DIGBY BROOKS
SAN FRANCISCO, CALIFORNIA
HENRY H. GUTTERSON, ARCHITECT
PHOTOGRAPH BY F. M. FRALEY



"Birch trees frame the tower and doorway"

STUDIO OF DIGBY BROOKS
SAN FRANCISCO, CALIFORNIA
HENRY H. GUTTERSON, ARCHITECT
PHOTOGRAPH BY F. M. FRALEY



ELEVATIONS OF STUDIO

STUDIO OF DIGBY BROOKS
 SAN FRANCISCO, CALIFORNIA
 HENRY H. GUTTERSON, ARCHITECT
 PHOTOGRAPH BY F. M. FRALEY



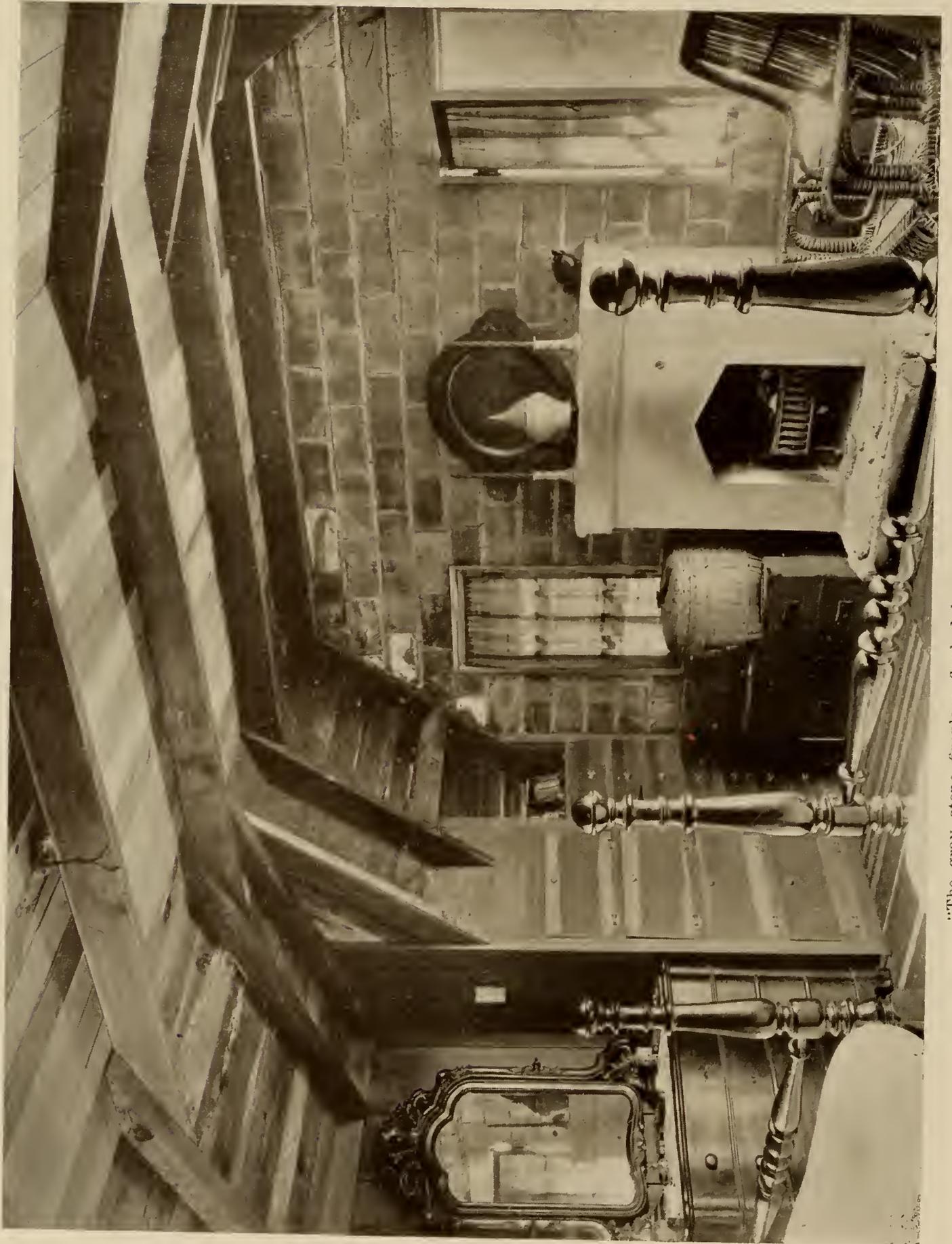
"The arras hanging below the balcony"

STUDIO OF DIGBY BROOKS
SAN FRANCISCO, CALIFORNIA
HENRY H. GUTTERSON, ARCHITECT
PHOTOGRAPH BY F. M. FRALEY



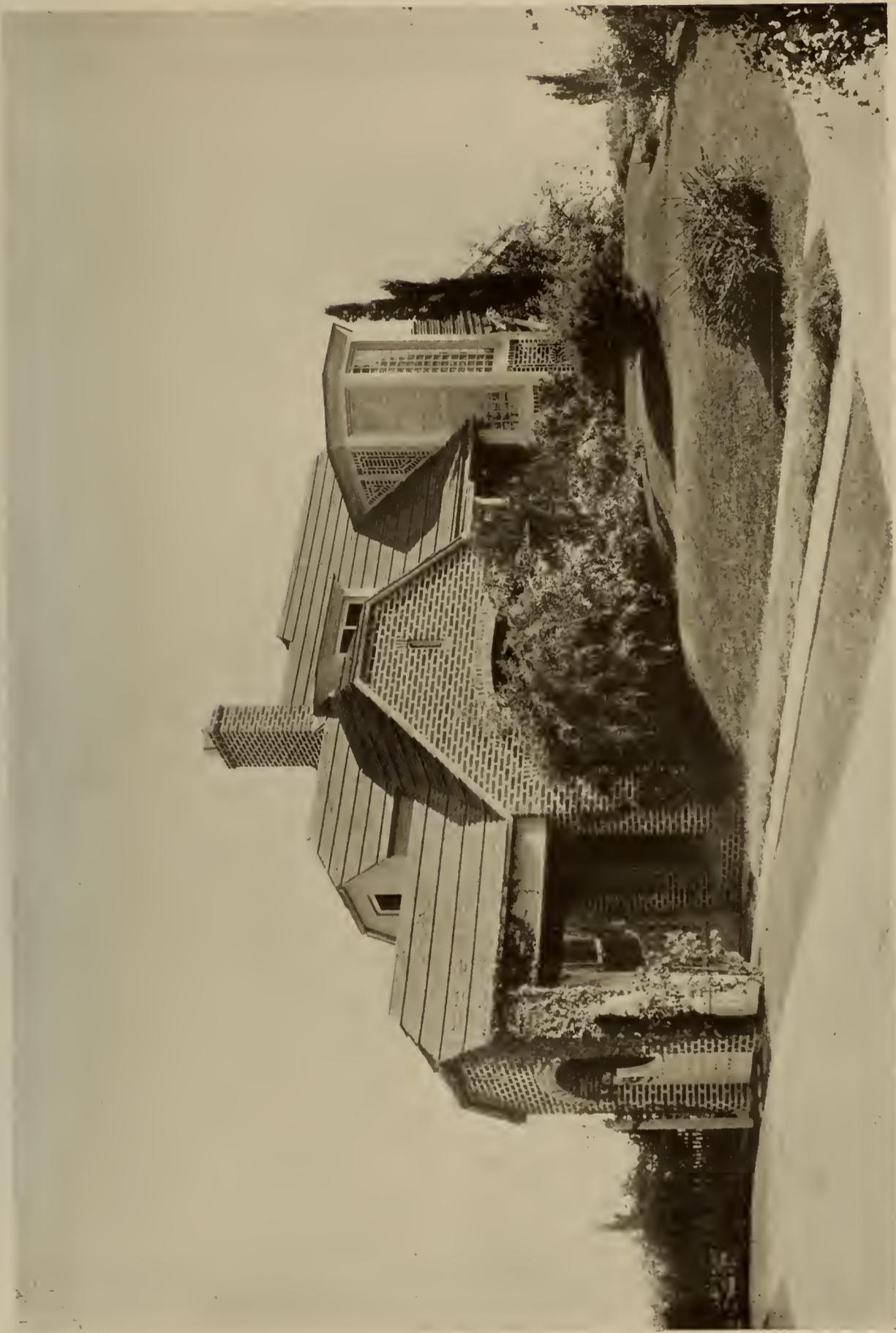
"Over-mantel decoration an armorial panel"

STUDIO OF DIGBY BROOKS
SAN FRANCISCO, CALIFORNIA
HENRY H. GUTTERSON, ARCHITECT
PHOTOGRAPH BY F. M. FRALEY



"The gray stone fireplace flanked by orange-curtained windows"

STUDIO OF DIGBY BROOKS
SAN FRANCISCO, CALIFORNIA
HENRY H. GUTTERSON, ARCHITECT
PHOTOGRAPH BY F. M. FRALEY



THE LE SAINT RESIDENCE
LOS ANGELES, CALIFORNIA
FREDERICK SOPER, ARCHITECT
PHOTOGRAPH BY OSCAR MAURER



THE LE SAINT RESIDENCE
LOS ANGELES, CALIFORNIA
FREDERICK SOPER, ARCHITECT
PHOTOGRAPH BY OSCAR MAURER



THE LE SAINT RESIDENCE
LOS ANGELES, CALIFORNIA
FREDERICK SOPER, ARCHITECT
PHOTOGRAPHS BY OSCAR MAURER



RESIDENCE OF W. L. DENISON
LOS ANGELES, CALIFORNIA
FREDERICK SOPER, ARCHITECT



RESIDENCE OF W. L. DENISON
LOS ANGELES, CALIFORNIA
FREDERICK SOPER, ARCHITECT



RESIDENCE OF W. L. DENISON
LOS ANGELES, CALIFORNIA
FREDERICK SOPER, ARCHITECT

THE BUILDING REVIEW



LE SAINT RESIDENCE

LOS ANGELES, CALIFORNIA

FREDERICK SOPER, ARCHITECT



MORROW RESIDENCE

LOS ANGELES, CALIFORNIA



MORROW RESIDENCE

LOS ANGELES, CALIFORNIA

FREDERICK SOPER, ARCHITECT

EDITORIAL

The "Northern California" movement, recently inaugurated, should result in a more evenly balanced, healthier growth of the entire state, if this campaign is carried out in a constructive way.

The reading public of the United States knows in a general way that California is a land of sunshine, fruit, flowers, and gold. Comparatively few people know definitely the variety and scope of its resources, its developing commerce and manufacture.

As the world is populated with Jack Spratt and his wife, a definite, informative and constructive publicity should bring it about that round peg "immigrants" to California will be fitted into their appropriate round holes as they may exist throughout the state, and square pegs into square holes. There will continue to be many worthy people who prefer the Southern climate and thrive on its comfortable warmth. The wonderful development of that region has been a tremendous asset to the State—and a mighty object lesson.

Northern California knows from its own experience that happiness, comfort and prosperity are also assured to those who prefer a cooler or a more inland climate, a different kind of life or livelihood. In this great State there is an almost unlimited range of choice.

Definite and accurate information available to prospective settlers—which means, to the rest of the country—is to be supplied through the Northern California movement. No fault can be found with this program, and its vigorous prosecution is most desirable.

Recently the Code of Building Ethics, prepared by the New York Building Congress for all the elements concerned with the building industry, was re-printed in the Building Review. This was a local attempt to establish a basis for co-ordination and improved standards of efficiency.

Other local, and some national conferences have been held, each contributing some specific action or suggestion toward the solution of the same great general problem.

These (comparatively) sudden efforts to cure the ills of the industry were brought into being, of course, by the war. Deferred construction, followed by high prices, resulted in a cramping shortage of buildings, restriction of business, discomfort and high cost of living. Something had to be done at once.

Following the local movements, and no doubt largely due to their incentive, comes the broad and comprehensive conference which is the first united, nation-wide endeavor to weld the building industry into a really efficient instrument of public service.

The American Construction Council met in Washington, D. C., on June 19 and 20, with Secretary Hoover presiding. Franklin D. Roosevelt, former assistant Secretary of the Navy, has agreed to accept the presidency of the organization.

The ten groups represented consist of:

1. Architects.
2. Engineers.
3. General Contractors.
4. Sub-contractors.
5. Construction labor.
6. Material and equipment manufacturers.
7. Material and equipment dealers.
8. Financial, bond, insurance and real estate organizations.
9. Public utility construction departments.
10. Representatives of Federal, State, County and Municipal bureaus or departments concerned with construction.

This council has been organized first, to find out what can be done to eliminate waste in production and labor, and conflict as to functions, wages, and profits; second, to give full publicity to the results of its investigations.

Such a council can issue no orders, for it has no enforcing authority. But, as Mr. Roosevelt says, "When the real facts of a situation are understood, there is nothing much to argue about. The council will 'control' the construction industry, not by balloting or opinions, but by ascertaining facts."

The importance of this definite start under unimpeachable leadership can hardly be over-estimated.

The few glimpses of Mr. Frederick Soper's work in Los Angeles, which the Building Review is enabled to show in this issue, give an idea of the picturesque quality of his designs. He combines various materials, irregular grouping of masses, and varying roof outlines, into compositions which have unity and yet possess that charm which is apt to come by accident alone.

A FEW NOTES ON ROSE CULTURE*

By PROFESSOR J. W. GREGG, UNIVERSITY OF CALIFORNIA
BERKELEY, CALIFORNIA

Rose growing by professionals as well as amateurs has been practiced for so many centuries that it would seem that growers of today ought to know and practice all of the important cultural details.

There are many factors involved in the successful growing of roses, and here in California, where we have a tendency to leave too much to our wonderful soil and climate, some of these essential requirements are often times neglected.

To begin with, one should select if possible a fairly heavy well-drained loam soil, on either a south or southeastern exposure. This soil should be well prepared by deep ploughing or spading, and by working into it a liberal quantity of old cow manure.

Well grown, healthy, budded or grafted stock should be purchased and planted in holes that have been dug sufficiently deep to thoroughly loosen the soil, in order that the future root growth may grow downward as well as laterally, for the future support of a good top growth. Many amateur gardeners fail in the cultivation of many plants because they do not dig large enough holes at the time of planting. Rose bushes should be deeply rooted, and not forced to become surface feeders. A deep hole also acts as a sort of a reservoir, and holds a reserve supply of moisture which the plant draws upon even when the surface soil may be in the shape of a dry, dusty mulch.

Roses should be planted far enough apart in the rose garden to permit of plenty of light and air around each plant, as well as to facilitate cultivation, pruning and the cutting of flowers. Some varieties may be planted as close as two feet, while others, of the stronger growing types, need at least three feet of space between plants.

After roses have been properly planted, the next most important operation is that of irrigation. The majority of amateur growers particularly, have a tendency to water all plants too often, and to apply water by the expensive method of promiscuous overhead sprinkling. Each rose bush should be watered individually, not oftener than once a week, during the driest months. This water should be applied to a basin, which should be formed immediately around the plant. This basin

should be filled up with water two or three times at each application, and allowed to soak into the subsoil. As soon as the surface soil is dry enough to cultivate, a loose mulch should be maintained. Watering should be done early in the morning in order that the soil may be somewhat dried out on the surface before night, as all plants ought to go into the night dry, particularly around the Bay Section, as there is no condition more conducive to an attack of mildew or rust than a constant moist atmosphere around roses.

Pruning is another very important factor too little appreciated and understood by the amateur rose grower. It should be remembered that roses produce flowers on new wood and that it should be the object of the grower to so prune his plants as to constantly relieve them of old wood and force them to produce new wood, as near as possible to the main stems or crown of the plant. All short jointed, crooked growth should be removed, and only straight vigorous shoots allowed to remain. A certain amount of pruning can be done with the cutting of every bloom if the grower would realize it. One has a tendency to cut blooms with a desired length of stem without any thought as to where new growth should break forth below the cut. Plants should be pruned so that they will maintain a well-shaped, evenly balanced top, and should not be allowed to produce growth so thick as to cut out sun and air from the center of the top. Different classes of roses need to be pruned differently, some requiring heavy cutting, while others do better with less severe pruning.

Here in California one has a tendency to force plants into maximum bloom the year around without recognizing the fact that Nature has provided a resting period for all plants, and that this resting period is for the purpose of recuperation or ripening of wood growth. Roses should, as a rule, have at least two resting periods and two growing periods during the year, here in California. They may come out of a resting period during the winter months of November, December and January, being cut back at that time and brought into good Spring and early Summer bloom. About the middle of July they may be rested off by withholding water until the latter part of August, when they

(Continued on page 14)

*Courtesy of Alameda County Garden Club.

INDUSTRIAL

SAN FRANCISCO FINANCIAL HUB OF PACIFIC COAST

Internal Revenue collections for the fiscal year ending June 30, affords convincing proof that San Francisco is the real financial hub of the Pacific Coast states, said Collector of Internal Revenue John P. McLaughlin, in a recent statement. The total collections in the San Francisco district amounted to \$81,259,266.24 of which \$55,600,000 was from income tax.

"This total is far greater than the combined collections of Oregon, Washington, Alaska and the remainder of California combined. In June \$10,122,936.14 was collected here. Of this amount \$8,872,447.84 was for income tax.

"When we consider the fact that incomes amounting to \$1,329,005,594 were turned in by taxpayers in one year in the San Francisco district some idea of the financial foundation upon which San Francisco is built may be obtained. Considering the fact that many of the special war taxes have been annulled the showing for the past fiscal year has been a satisfactory one. Taxpayers are meeting their obligations promptly and they are entitled to the thanks of the Government for the hearty co-operation they have given us in the five drives we had on during June in which practically 100,000 persons either paid taxes or registered as required by law."

UNIVERSITY OF CALIFORNIA TO BUILD NEW EDUCATIONAL BUILDING

Construction of the new \$350,000 School of Education Building will be started early in August according to a recent announcement.

Plans and drawings for this new structure have been completed by John Galen Howard, University Architect, and are now in the hands of the contractors.

The new building will carry out the building program of the late Mrs. Phoebe Hearst in its white California granite exterior.

The site will be opposite the University Library on the present location of the old Horticultural Building.

Commenting on this addition to the University, President David P. Burrows said in part: "With the completion of this unit of the University the present congestion of Wheeler Hall and the University Library will be greatly relieved and classes will again be held on a normal pre-war basis."

OAKLAND ERECTS MANY NEW BUILDINGS

Activity in all branches of real estate, particularly in the business district, is shown in the report of the Oakland Real Estate Board.

Three large office buildings are to be constructed in the downtown section south of Fourteenth Street, an eighteen story building on Thirteenth Street, the Athens Club building on the Southern Pacific property at Fourteenth and Franklin Streets and the new addition to the Oakland Bank of Savings.

In addition to the above the new Fox Theatre on Broadway near Nineteenth is under way, the East Bay Market at Nineteenth and Telegraph is rapidly nearing completion and an office building is being planned for the corner of Fifteenth and Telegraph.

The new Tribune Building is a feature of the extensive building program. It is to be a nineteen story Class "A" structure with steel frame and concrete, faced with specially designed pressed brick similar to the present Tribune Building. The new building will be completed by July 1, 1923. Plans were drawn by Edward T. Foulkes of Oakland, who will have general supervision of building operations.

The Real Estate Board sums up the general situation as follows:

"The almost daily acquisition of new industries by this community with its consequent steady increase in industrial payrolls and the incidental increase in the volume of commercial activity of the city, as well as the rapid but normal increase in population is creating a demand for floor space in the downtown district for stores and offices to a degree never before experienced and far beyond the estimates of a few years ago made by the most optimistic of commercial district realtor experts."

P. G. & E. TO EXTEND SERVICE TO MILL VALLEY AND SAUSALITO

Work is shortly to be undertaken on the high pressure gas transmission line which will supply the towns of Mill Valley and Sausalito with gas for the first time, filling a long felt want in these commodities. Engineering parties of the Pacific Gas and Electric Company are now engaged in the field surveys and active work will be commenced within a few days. The pipe line will be approximately six miles in length from Corte Madera, terminus of the present main, to Sausalito. The branch line to Mill Valley will be approximately two miles in length. The pipe line will be six inches in diameter. The cost of the main is estimated at \$192,000.

SAN FRANCISCO ATTRACTING MANY NEW INDUSTRIES

A recent report issued by the Chamber of Commerce show that 102 new factories have been established in San Francisco since January 1922. From 1920 to date the city has acquired 691 new factories, 5,429 additional employees and an increase in its payroll of over \$10,000,000. The last United States census showed the city's payroll to be \$142,301,000 but that it is many millions in excess of that amount at the present time is indicated by the above noted additions in the industrial fields.

San Francisco Realtors report that the first half of 1922 has been the best in the history of the city. Figures compiled by Thomas Magee and Sons record a 60 per cent increase in real estate sales over the same period in 1921. The number of sales for this period totaled six thousand two hundred and ninety-four, an increase of 20 per cent over the highest number of sales recorded for any similar length of time.

Present indications are that this is not a temporary boom but that the present activities will continue throughout the rest of the year.

W. P. FULLER & COMPANY ADD TO HOLDINGS

A purchase was recently made for W. P. Fuller & Company by the A. J. Rich Company of the entire land and improvements of the former "Steiger Terra Cotta and Pottery Works" in South San Francisco. There is

more than ten acres in this new addition and the purchase price is said to be far in excess of \$10,000 per acre.

Improvements will be started at once on the newly acquired land and will add greatly to the already large holdings of this company.

That the industrial development of San Francisco is about to be fully recognized on the lines drawn by engineers who claim that the shore line and pier head will continue on the San Francisco side down the peninsula is again emphasized by this purchase the benefits of which will accrue to South City and San Francisco.

RICHMOND BUILDING ACTIVITIES

The largest building movement Richmond has ever known is now under way. The Builders' Exchange reports that over half a million dollars worth of building construction is under way at the present time.

Thomas A. Reed, a local merchant, is erecting a large apartment house with stores on the ground floor. The local chapter of Redmen have plans drawn for a hall to be erected in the near future.

The Bay Cities Home Builders, Inc., have taken out permits for several new homes which will be erected on Key Boulevard in the hill residence section between San Pablo Avenue and the new Country Club.

EMERYVILLE BUILDING NEW INDUSTRIAL PLANTS

A series of modern manufacturing plants are now being constructed on the Oakland Terminal, formerly the Emeryville Terminal Tract, according to an announcement of E. B. Field of the Mee Estate.

Development work, which includes grading, heavy concrete streets, large water mains, sewers and spur tracts is well under way.

The buildings will be of one story and will be leased out in units of 10,000 square feet. Each 20,000 square feet of building will have about eighty feet of parking space planted to lawns with side walk and street space in front and eighty feet of spur tract in rear. Material and merchandise movement will be on one level from car to factory or from warehouse to motor truck.

Re-enforced concrete construction will prevail throughout including heavy concrete loading platforms.

SHORTAGE OF HOUSES IN UNITED STATES

Despite the increased building activity in the United States during the last six months, the housing shortage for the country as a whole was today estimated as somewhat more than two and a half years' production by John Ihlder, manager of the Civic Development Department of the Chamber of Commerce of the United States before the National Conference of Social Work. According to Mr. Ihlder the situation is not the same in all American cities. In some cities the shortage is estimated as nearly four years, he said, while in others, it is approximately one and a half years, or even less.

"This means," he explained, "that many thousands of American families are still living in crowded quarters, well-to-do families as well as poor. More significant, it means that a considerable proportion of these families are becoming accustomed to this cramped living, accepting it as normal. I have heard of an Admiral of our Navy, who, with his wife and two sisters, occupies three rooms in an expensive apartment house and has his meals prepared on an ingenious little electric stove in the hall, of a comparatively well-to-do woman who occupies one room and bath and has her laundry washed in the bath room. When one goes from such people to the poor, he finds the old over-crowding accentuated and insanitary conditions worse than they were before the war."

Mr. Ihlder pointed out "that while we cannot expect house building to continue long at its present speed, we may hope that it will continue to exceed current increase of need and so gradually reduce the shortage. Coincidentally we may expect that building prices will come down, not steadily—just at present they are rising from the lower level of the winter—but with occasional flats and accents. This means that we may hope for dwellings produced and sold at smaller cost and so put within the means of a constantly larger proportion of the people until the day comes when the old procession is once more started from poorer houses to better houses and so make available to families of small means the old but adequate houses that are still habitable. At present there is an hiatus between the expensive houses under construction and the dwellings of the unskilled wage-earner. At present and for some years in the future, so far as we can foresee, there will be

little or no building of new dwellings, at least in the east, for unskilled wage-earners.

"Desire for such dwellings is likely to expose us to an insidious danger; the attempt to cheapen construction by diminishing the space put at a family's disposal or by encouraging shoddy construction. The short cut of shoddy construction which has been, and still is to a lesser degree, one of our greatest menaces, promises to offer earlier relief, but at a cost which our children and grandchildren will not pay. The short cut of diminished space has amply proved its fallacy in tenements of New York. Its ultimate results will be higher rents for a population so crowded together that it can not live, but will merely exist

"From the housing point of view, the most encouraging development of the past two or three years is the extension of zoning regulation in the United States. Begun just before the war, zoning gripped our imagination and as soon as peace returned American cities began to apply it. Today some sixty cities have or are drafting zoning regulations. Because of these zoning regulations they are keeping in their residence districts the open spaces which are the fundamentals of good housing."

UNITED MATERIALS COMPANY
OPEN NEW OFFICES

The United Materials Company announce the removal of their offices from the mezzanine floor of the Sharon Building to Suite 808 in the same building.

Here they have installed a display of face brick of every description including the Richmond Tan and Red Rug Brick laid in various mortar colors, as well as an exhibit of Granada Roofing Tile and Hollow Building Tile.

A unique feature of these new display rooms is the panel arrangement showing the various face bricks used in building construction. These panels are so arranged that but one type of brick is visible at a time. This avoids the usual difficulty of having several kinds of brick in view at the same time which renders it very difficult to visualize an entire wall of the particular brick under consideration.

The United Materials Company extend an invitation to architects, contractors, and their clients, to visit the new offices and make use of the various displays in making a selection of materials.

REVIEW OF TRADE LITERATURE

"Concrete for Town and Country" is the name of a 189 page booklet issued by the Lehigh Portland Cement Company, Allentown, Pa. The book is divided into three parts. Part one contains photographs showing concrete and its various possibilities. Part two gives general information on the many uses of concrete. Part three contains tables and explanations of the various uses of concrete. For the man who is interested in concrete and its adoption to various construction purposes this book will prove a source of valuable information.

The Monarch Metal Products Company, 5020 Penrose Street, St. Louis, Mo., have issued a new Manual of Casement Window Hardware. The Manual complies with all suggestions and recommendations of the American Institute of Architects and will be mailed upon request.

"Sylphon Heating Specialties" is the title of an attractive booklet published by the Fulton Company, Knoxville, Tennessee. This is the first general catalog put out by this company and contains many interesting features relating to heating and temperature regulation.

The Truscon Laboratories, Detroit, Michigan, announce an "Architect's Specification Handbook" which will be mailed upon request. This is a revised edition of the Truscon Specification Book, and contains 104 pages of specifications on Waterproofing, Dampproofing, Oilproofing, Technical Finishes, Metallic and Chemical Floor Hardeners, Protective Steel Coatings and Architectural Varnishes. The binding is loose leaf, making the set of Specifications adaptable for use either as a reference book for the A. I. A. Filing System or for any other classification adapted by the Architect's or Engineer's office.

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DISTRIBUTION OF PHILIP
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The Jones Brothers Asbestos Supply Company Incorporated of 512 Second Street, San Francisco was recently organized and has been appointed distributor for the Philip Carey products in California and Nevada.

"Business conditions in Northern California were never better," said Edward F. Jones, manager of the company, who has just returned from a survey trip of the Sacramento and San Joaquin Valleys." "Signs of prosperity are on every hand. Homes and factories are rising in great numbers throughout the entire field. Every one seems to be pulling together with a new spirit of cooperation which is contagious."

Architects, builders and contractors realize the importance of asbestos roofing, and magnesia which insure a long life to roofs, pipes and boiler work.

Magnesia coverings have been the standard of the United States Navy Department for over thirty years. More of it has been used in stationary power plants, in marine work, and on locomotives in the form of lagging than all other kinds of high pressure coverings. It is well recognized as a most permanent practical conserver of heat.

The Jones Brothers maintain a laboratory in San Francisco which is open at all times to Architects and Builders. A complete line of Carey Products are on exhibition and every assistance is extended the prospective builder in making a selection of building materials.

Seven homes in Benicia have recently been roofed with the Carey Flexible Roofing. This roofing was laid over the old shingles. The new Bank of Italy building in San Francisco is covered with the Carey Asbestos Roofing.

PROSPERITY SEEN BY REALTORS
AND CONTRACTORS

Clarence K. Nichols, Oakland contractor, states that building construction has reached a point never before equaled in the East Bay District. Mills, lumber yards and other factors composing the building industry are mobilized and are in a position to serve the public better than ever before. The period of depression has been passed and we are well on the way to permanent prosperity. Building materials have dropped to a substantial level where it is safe to say that prices will not vary to any great extent. The period of reorganizing has covered over two years and this period of prosperity has come to stay. It is not an over-night boom. The East Bay builders must prepare themselves for one of the largest years in the history of the industry.

A N N O U N C E M E N T

J. A. DRUMMOND HAS ESTABLISHED ADDITIONAL OFFICES AT 508 DOUGLAS BUILDING, LOS ANGELES, CARRYING WAREHOUSE STOCKS. ALSO OFFICES AT 2225 FRESNO STREET, FRESNO, CARRYING CERTAIN WAREHOUSE STOCKS IN ADDITION TO OFFICE AND WAREHOUSE STOCK CARRIED IN SAN FRANCISCO. I AM IN POSITION TO QUOTE ON MATERIAL ON APPLIED PRICES.

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CONTRACTOR AND DISTRIBUTOR
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 PHONE DOUGLAS 3424

2225 FRESNO STREET
 FRESNO
 PHONE 4073

508 DOUGLAS BUILDING
 LOS ANGELES
 PHONE 823947

(Continued from page 9)

may be again pruned and started into early Fall growth. During these resting periods, only enough water should be applied to prevent the bark of the main stems from shriveling up. No harm will be done if some of the small weaker growths do dry back slightly, and lose some of their leaves.

When plants are producing vigorous growth, fungus diseases, such as Mildew and Rose Rust, together with insect enemies like Green Aphis, Red Spider and Mealey Bug, may demand a certain amount of constant attention. There are many remedies for the control of these diseases and insect enemies, all of which are more or less efficacious, depending upon the thoroughness and frequency with which they are used.

Mildew may be controlled by thoroughly dusting the plants with sublimed sulphur early in the morning of bright, sunny days, or they may be sprayed with a solution of Potassium Sulphide at the rate of about three ounces dissolved in 10 gallons of water. New growth should be kept constantly covered with any fungicide. Rose Rust may also be controlled by the use of the materials just mentioned, but should it become too bad before such materials are applied, the parts

of the plant most affected should be cut off and burned.

The Green Aphis, Red Spider, Wooley Aphis and Thrip may all be controlled by the use of any of the Nicotine extracts now on the market, diluted according to directions, or by the use of a soap or kerosene emulsion. Regular syringing with a good, stiff, fine spray of water on the foliage once or twice a week on bright, sunny days will materially discourage the rapid spread of the Green Fly and Red Spider.

In conclusion, therefore, the principal factors governing successful rose growing here in California are:

1. Desirable varieties.
2. Good soil and exposure.
3. Well prepared soil, and well planted stock.
4. Proper irrigation and cultivation.
5. Proper pruning and the recognition of resting periods.
6. The control of fungus diseases and insect enemies.
7. Proper fertilization by the use of a manure mulch, or the application of bone meal around individual plants, at the beginning of the blooming period.

(Continued from page 6)

gardens. In this extra-illustrated American translation of an Italian pleasance, however, the flowers are, after all, of all its features the most beguiling. And these flowers have been chosen not merely for their glad color, but also for a certain airy grace. A lightness results that is not usually found where bloom is so luxuriant.

Not here are the staccato reds,—very few indeed even of the shell pink tones. White, blue and gold make up this color chord. Blue and white to enhance one another and to make for serenity, — many and varied greens to serve as foils,—and gold for romance,—but the color scheme to be sure, is another story.

To return to our wall-fountains, the point we wish to stress is just the fact that they are standing proof that architectural accessories can be so perfectly blended with natural beauties that each will set the other off. The truth about the art of gardenage which Edith Wharton pointed out is here exemplified to perfection to-wit, the glamor of the manner which we know as Old Italian is due to the complete harmonization wrought between “marble, water, and perennial verdure.”

REINFORCED CONCRETE SKY-SCRAPERS

Tall buildings are numerous in our large cities. Often the only comment that they attract is one of protest against the obstructions encumbering the sidewalks during their construction. After a building has been completed few persons not conversant with types of construction will see anything to distinguish it from another similar building. The fact that it may be an entirely different type of construction, introducing perhaps new things of great importance economically, seldom becomes common knowledge. Also seldom does it happen that the average citizen recognizes in a new type of skyscraper an established, accepted type of construction, having advantages peculiar to that type alone.

It really required world war conditions to give the necessary impetus resulting in larger, more extensive adaption of reinforced concrete for skeletons of tall structures. Designers thus forced through inability to obtain materials for the commoner types of construction, turned to concrete and at the same time found to their surprise that the cost of such structures was lower than they had pre-

(Continued on page XVIII)



Sheridan Plaza Hotel
Chicago, Ill.

Architect,
Walter K. Ahlschlager

Glazed by
Sharp, Partridge & Co.

THE window glass throughout this hotel is a product of the American Window Glass Company.

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HARMONY IN BUILDING

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SAN FRANCISCO

St Francis Wood--a Residence Park

THE
BUILDING
REVIEW



AUGUST, 1922

25 Cents

Vol. XXII No. 2

Published in San Francisco



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THE BUILDING REVIEW

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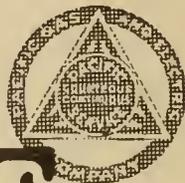
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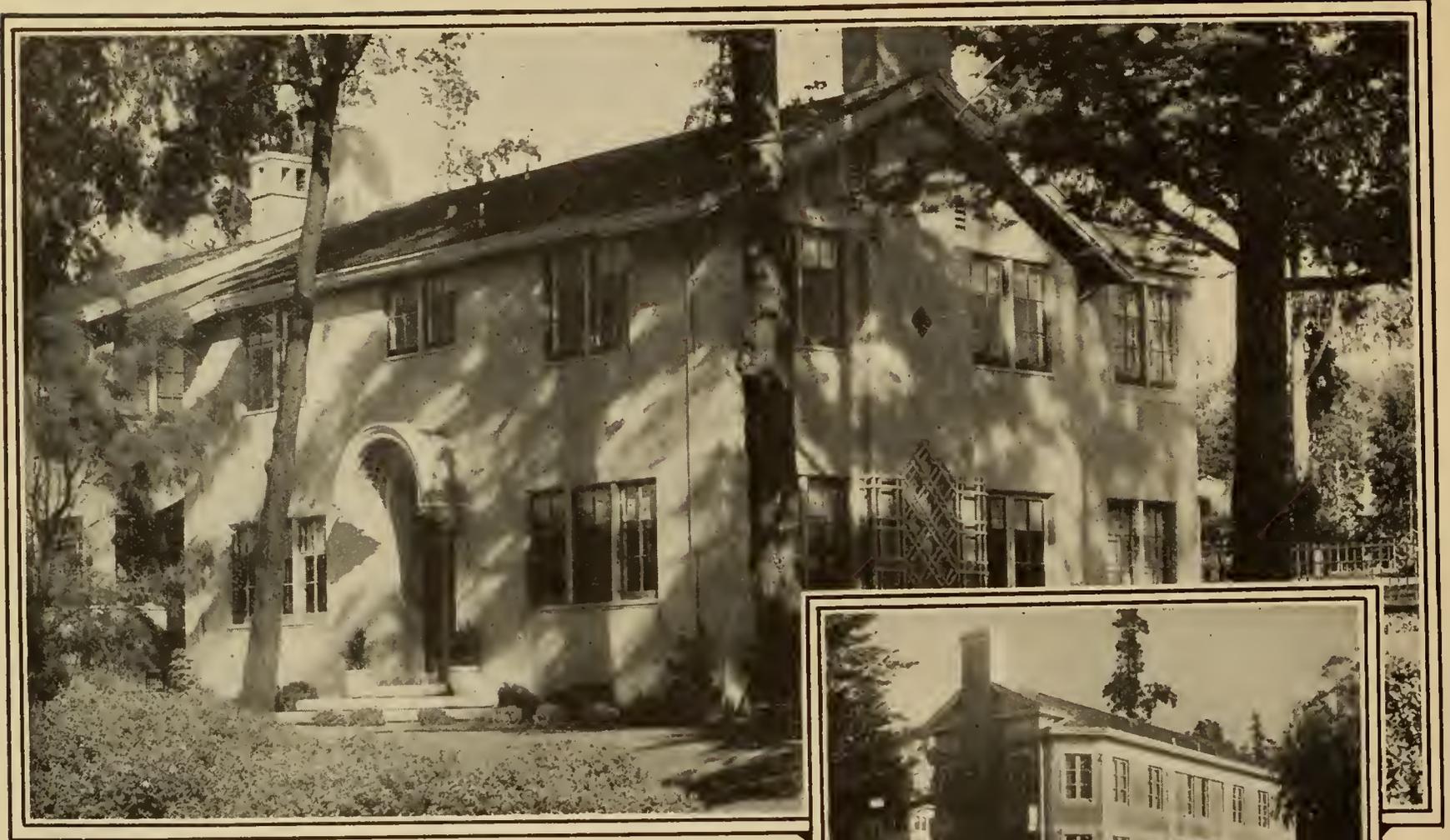
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Residence of Mr. Theodore Roche. (Right)
Architect Mr. Henry H. Gutterson.

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VOL. XXII

SAN FRANCISCO, AUGUST, 1922

No. 2



Residence of Fred Stebinger

Henry H. Gutterson, Architect



Residence of Clyde Beal

Henry H. Gutterson, Architect

ST FRANCIS WOOD

By WARREN CHARLES PERRY, *Architect*

About a decade ago the writer became acquainted with the artistic venture well-known now to us all as St Francis Wood; a venture then considered so very venturesome by rivals in the realty field that it seemed hardly possible of success, yet launched with such a sympathetic understanding of the unexpressed and unanalyzed longings of the home-hunter, such

honest craftsmanship and above all, such sublime faith in the ultimate value of really fine things, that it could not fail.

The writer heard with interest of the manifold attractions of this new "happy valley" behind Twin Peaks, where, amid gardens and fountains the jaded moiler in the mill of commerce might renew himself at the day's end,



ST FRANCIS BOULEVARD

his eye untroubled by gaunt skeletons of telephone poles shrouded in wires, or the horrors of unkempt streets, and his nervous car unshocked by the ghastly gibberings of street car brakes.

Translated, in short, to an elysium where the mechanical servants of mankind were to be kept strictly in the background and all the latent lovelinesses of Nature brought out and clustered around his doorstep, Moiler and Mrs. Moiler and all the little Moilers (fine children they are too!) might live such a normal, wholesome life as the good Lord intended for them.

Furthermore, they were not to be forty-five minutes from Broadway, but only twenty from Third and Market!

Now it has all come true—St Francis Wood is a reality—not mere realty—accepted by us all, except the chronic skeptics and the hopeless apartment dwellers and emulated with various degrees of skill by other neighboring communities that have followed the pioneer.

It seems, to him at least, proper for the aforementioned scribe to dwell a little upon some of the beauties of this singularly pleasant spot, since he is so unfortunate as not to dwell among them in fact—for he feels, it must be confessed, a sort of paternity—once-removed for the man-made part of the place. Why he even worked out those loggias and little oval

courts, by the west entrance when his boss was away!

The original subdivision comprised about one-half of the present whole, the kite-shaped portion balanced on the St Francis Boulevard axis, handsomely situated on a gently sloping plane that looks through a fringe of pine and eucalyptus across the ever-green meadows of Lake Merced to the Pacific. Its street arrangement is excellent, giving finely proportioned lots, fifty or sixty feet wide and never more than a hundred feet deep (usually less). These enjoy admirable east and west exposures and front on level or nearly level avenues. Would that the hills of San Francisco itself been laid out with half the sagacity—we should have been spared the dizzy grass-grown streets and the limitless backyards our hasty forefathers bequeathed to us!

Due to the shape of the blocks, long and narrow, the lots abut on one another at the rear; three feet of the back of each one, united, give a six-foot right of way wherein are located all sewers, gas and water mains, telephone and electric services. Think of what that means! No upheaving of the excellently paved streets or gardens to get at broken drains or to put in new ones—no gristly network of wires or crooked poles before the little facade that you and your architect have developed with such loving care.

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ST FRANCIS FOUNTAINS

HENRY H. GUTTERSON, Architect

Restrictions of course exist governing the nature and extent of buildings within these sacred precincts. One-family homes alone are permitted, and these not over two stories high with setbacks of fifteen or twenty feet from the rear of ten feet. No present or future owner may subdivide his lot into holdings of less than forty feet frontage and every dwelling must keep between itself and its lot lines a minimum of one-tenth of its frontage, on each side.

All laws work hardship upon the just—restrictions are ever irksome to the skilful and gifted architect who, in striving for a given effect, that once built would meet with merited praise, is baffled and defeated by an arbitrary rule. But all builders of houses, alas!—are not architects—no, nor yet the hundredth part of them—so like Democracy we must worry along with restrictions and sacrifice the rare achievement to the prevention of the common abuse.

So much for the practical—the Public is so invariably astonished when an architect is practical—even for a minute!—now for the spiritual. Here were invoked the genius of Frederick Law Olmstead, master gardener and John Galen Howard, master builder, who laid out and enriched the scheme so originally executed. Credit must be given here, however to Mr. H. H. Gutterson for the fine fountain that heads the main axis.

Enough cannot be said of the taste and

judgment of the promoters, themselves of St Francis Wood, in connection with this part of the work. The Mason-McDuffie Company spared no pains—they invited the best talent available. In particular is remembered the painstaking enthusiasm of Mr. Duncan McDuffie over the aesthetic side of the enterprise as well as over the multitude of less lofty but very necessary details. And while in the beginning the thing belonged to them to do with as they saw fit, they made provision for the gradual change in government as the property passed to individual hands by giving votes on matters of community interest in direct proportion to his land ownership. Eventually the government of St Francis Wood, insofar as it is not covered by the city government will be entirely vested in the owners themselves.

One word more in general, and this is to me the most worthy of remark of all, there has been maintained from the start a system of—what shall I say—censorship?—No!—Out, Horrid Word!—helpful criticism of plans before the designs are carried out and of alterations afterward, even on such delicate subjects as color. Fancy telling a man that he cannot paint his own castle red or blue or magenta if he takes the notion. What magnificent courage! But after all, doesn't a dreadful, livid housefront pain the man across the street more than the perpetrator thereof?

Of course, it goes almost without saying that the success or failure of any such arrangement as this hinges absolutely upon one thing—the nature and qualifications of this critic whose word is law. It is vicious or beneficial according to his emptiness or his sane and impartial good taste. I would that I might whisper in the smallest of type some of the spicy tidbits that the present dictator of architecture in St Francis Wood told me—but it couldn't be done. How you would enjoy hearing about the man who insisted upon putting a etc., etc.

Suffice it to say that Mr. Gutterson, as supervising architect has stuck by his principles these first difficult years and averted many a tragedy in his particular bailiwick. May he hold on, Brave Soul, till every vacant lot yields to a garden enshrining a villa that charms and not offends the eye.

A few words as to the work here reproduced, which must be seen on the ground to



St Francis Fountains



Niche—Entrance Loggia

be fully appreciated; for, be it repeated, the greatest asset of St Francis Wood is the *effect of the whole*, rather than even the interest that attaches to the conspicuously superior houses that lie within its boundaries. The settings for these houses are varied and at the same time bound into a common scheme—far enough apart to avoid any discord due to their widely different types and close enough together to be the homes of modest town-dwellers.

As usual, the greatest imagination and address in handling, is not always found in the largest houses, it is particularly in such lesser examples as the cottage of Mr. Hermann A. Mattern by Mr. Gutterson that the true note of the place is sounded. Noteworthy in this class is a group of one-story houses by Morrow and Garren, one of which is shown, that belonging to Dr. William Wadleigh.

Among the larger residences the one built for Mr. Chauncey S. Goodrich, by Ward and Blohme is conspicuous—perhaps mainly on account of its length and simple mass. If it be easier to keep the unity of mass in a tiny house, it is a grand advantage in a large one to have the number of elements neces-



St Francis Fountains

sary to produce length and repose—but how few of us can resist the temptation to clutter things up and waste all this advantage when it is afforded us!

Another decided success of this same type is the good New England mansion of Mr. Dixwell Davenport, by Julia Morgan, to which group also might be admitted, on probation, the house for Mr. D. B. Chandler.

Two houses, similar in mass and pleasing without any distinct ancestry are those of Mr. George Dyer and Dr. W. E. Chamberlain, while Italiano-American origin marks Mr. J. H. Leighton's home. These three are all by Mr. Gutterson, and afford among other things a splendid idea of the richness and interest in both the common and private gardening in the tract.

One of the most promising young gardens, by the way, is the excellent one that forms the setting for the house of Dr. Wallace Bruce Smith, which is itself unusual, and marks an ingenious composition of elements difficult of arrangement. It is so hard to clothe our struggles with an air of easy mastery!

Next the artists' house, or at least the house

of a connoisseur, Mr. Paul Raymond. Nothing we have shown better displays the versatility of the designer or his ability to catch the faint elusive character of the eucalyptus-clad hillside that we think of as so very Californian (though of course an importation). This house is not for every client—but where is he who cannot enjoy it as a passerby.

Mention should be made in enumerating the desirabilities of the place of the Commodore Sloat School lying just beyond the confines of St Francis Wood—itsself conspicuous among the new schools of San Francisco.

And so on—time and space are limitless—many delightful examples of our fresh, yet soundly derived, American home architecture are to be seen here that have not found their way into these pages. May their turn come later.

In the meantime, Dear Reader, if you have not already done so, turn your radiator thence some fair Sunday morning and see for yourself what has happened back of Twin Peaks during these ten years past.



St Francis Fountains

EDITORIAL

From the day of its opening, St Francis Wood has been a model along landscape and gardening lines. It has served as guide and inspiration in the development of many another residence tract; but it is doubtful if any other development has attained such aesthetic and practical success.

To recognize the wisdom and good taste which has produced such a district is both a duty and a pleasure, and is in keeping with the constructive policy to which the Building Review is dedicated. St Francis Wood is of more educational value to the public than most public parks. Its location and treatment are such as to extend its influence to an unusual degree. It is safe to say that no visitor in San Francisco for more than a day leaves without seeing this district, and local motorists are hardly more familiar with the Civic Center.

This is a community asset which is definite and far-reaching.

Occasional echoes (chiefly in letters to the public press) are plaintively repeating questions as to the status of San Francisco's proposed War Memorial. It would seem to be proper for the committee in charge to make some report of progress from time to time, in a matter of so much interest to so many people, or at least to make a statement as to whether the project has been abandoned or is resting. The local chapter of the American Institute of Architects might with propriety investigate the subject, as one of public architectural, monumental importance.

Incidentally, let us hope that the movement so actively started, to restore the fine and historic "Column of Progress" will not be allowed to lapse. The Chapter passed a resolution heartily endorsing this restoration, for reasons of both art and sentiment. If only the entire site of our big fair, whose picture still lingers in our minds and hearts, could be preserved as a Memorial Park!

A book is now ready for publication, according to an announcement received from the Committee on Education of the American Institute of Architects, which should become a tremendously important factor in the development of American civilization. "The Significance of the Fine Arts" is to be a volume of 500 pages, with many illustrations, recounting concisely the efforts of the human race toward self-expression.

The ten chapters, with their authors, are as follows:

PART ONE

Classic Architecture	<i>C. Howard Walker</i>
Medieval Architecture	<i>Ralph A. Cram</i>
Renaissance Architecture	<i>H. V. B. Magonigle</i>
Modern Architecture	<i>Paul P. Cret</i>

PART TWO

Painting	<i>Bryson Burroughs</i>
Sculpture	<i>Lorado Taft</i>
Industrial Arts	<i>Huger Elliott</i>
Landscape Design	<i>F. L. Olmsted</i>
City Planning	<i>Edward H. Bennett</i>
Music	<i>Thomas Whitney Surette</i>

The purpose of this great undertaking is "to awaken the interest of the layman and student to the true importance of art in our daily life."

It is hard to define the educational possibilities of this book. Its influence through schools, colleges, libraries, societies, will be immediate and extended. Its absorption by the general reading public will be more gradual, but certain. The success of the book has a direct bearing upon the interests and ideals of architects and artists everywhere—in fact, of all the manifold connections of the building industry. If "art is the flower of civilization," a rich and fertile soil of appreciation is necessary for its production.

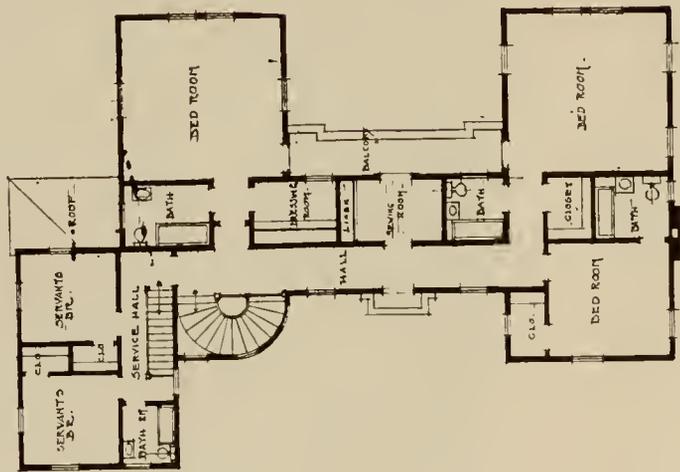
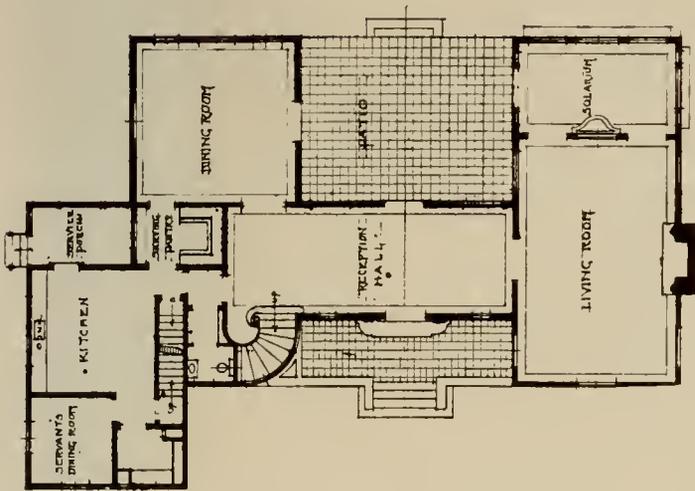
Certainly architects will realize the value of supporting this undertaking promptly and enthusiastically. Inquiries should be addressed to C. C. Zanzinger, Chairman, 112 South Sixteenth Street, Philadelphia, Pa.



RESIDENCE OF AUGUST FRITZE
ST FRANCIS WOOD, SAN FRANCISCO
HENRY H. GUTTERSON, ARCHITECT
Photographed by GABRIEL MOULIN



RESIDENCE OF DIXWELL DAVENPORT
ST FRANCIS WOOD, SAN FRANCISCO
JULIA MORGAN, ARCHITECT
Photographed by GABRIEL MOULIN



RESIDENCE OF DR. H. E. RUGGLES
 ST FRANCIS WOOD, SAN FRANCISCO
 HERBERT A. SCHMIDT, ARCHITECT
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RESIDENCE OF DR. WALLACE BRUCE SMITH
ST FRANCIS WOOD, SAN FRANCISCO
HENRY H. GUTTERSON, ARCHITECT
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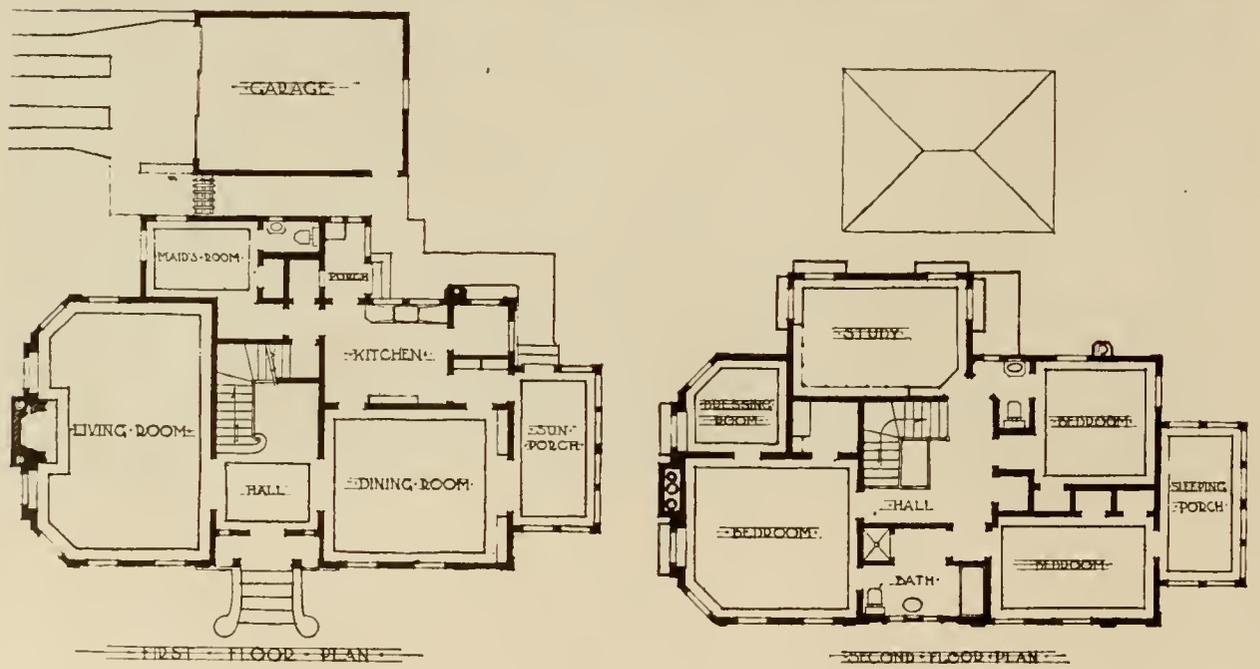


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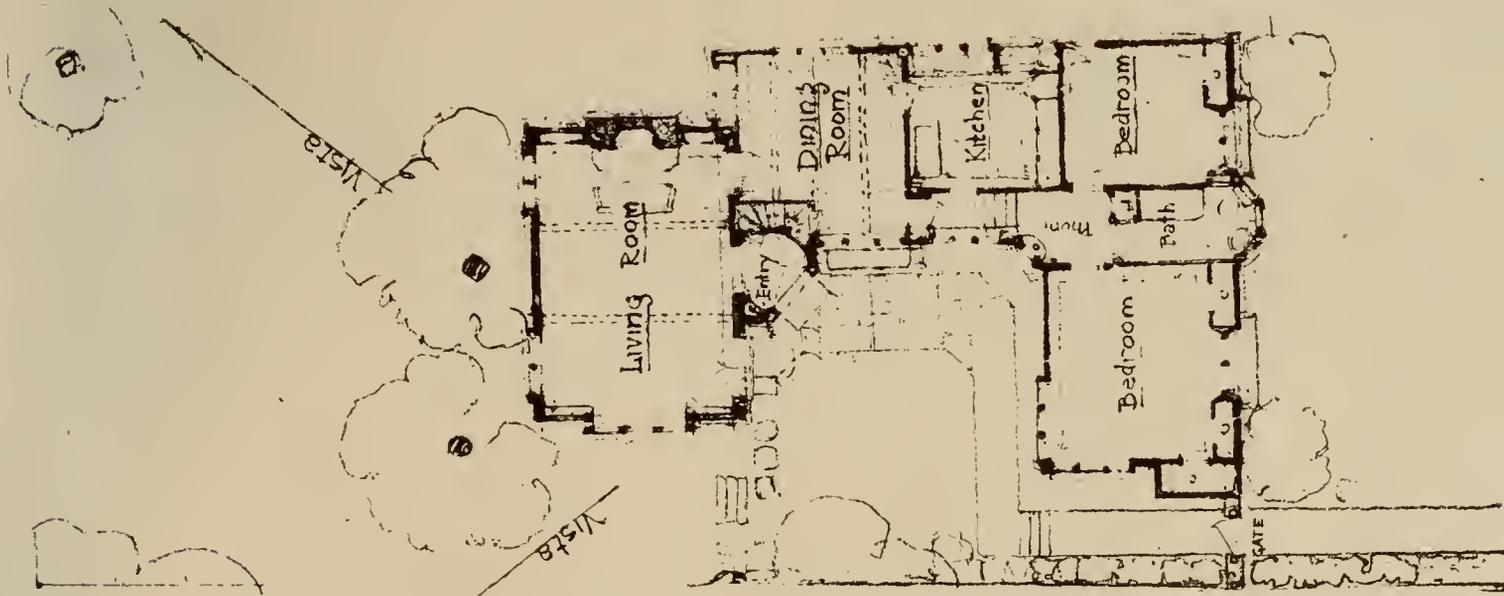


RESIDENCE OF DR. W. E. CHAMBERLAIN

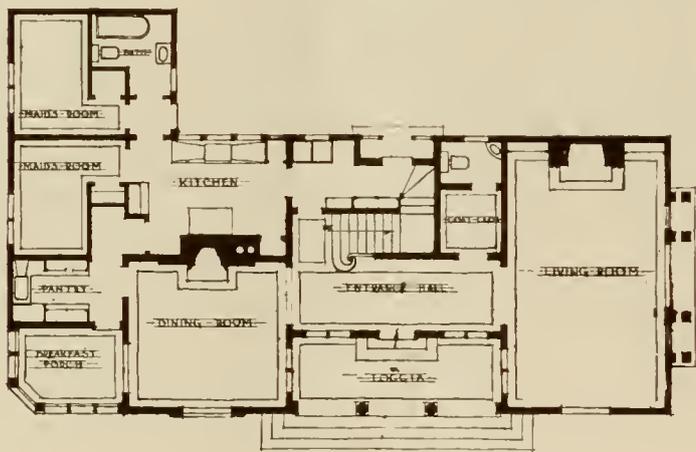
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HENRY H. GUTTERSON, ARCHITECT
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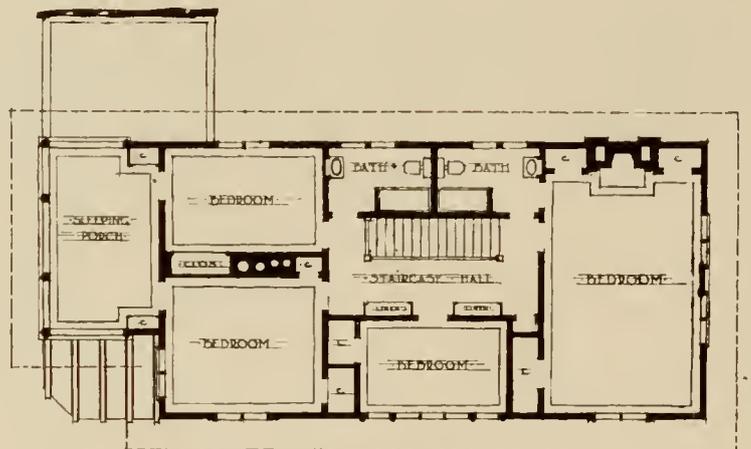
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RESIDENCE OF PAUL RAYMOND
ST FRANCIS WOOD, SAN FRANCISCO
HENRY H. GUTTERSON, ARCHITECT
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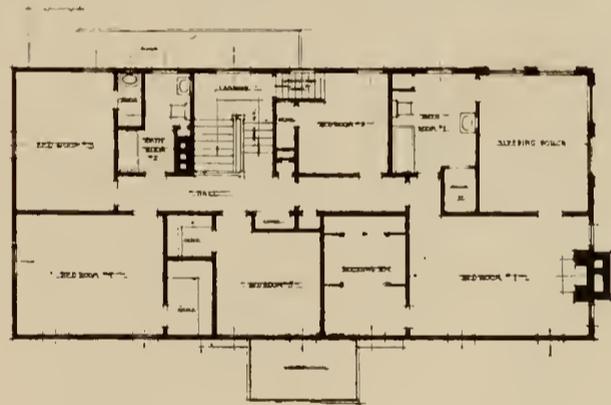
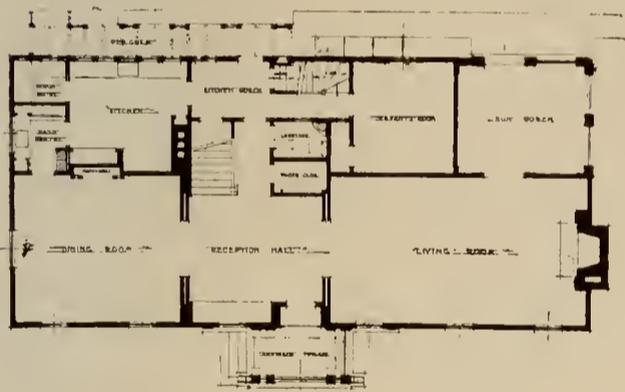


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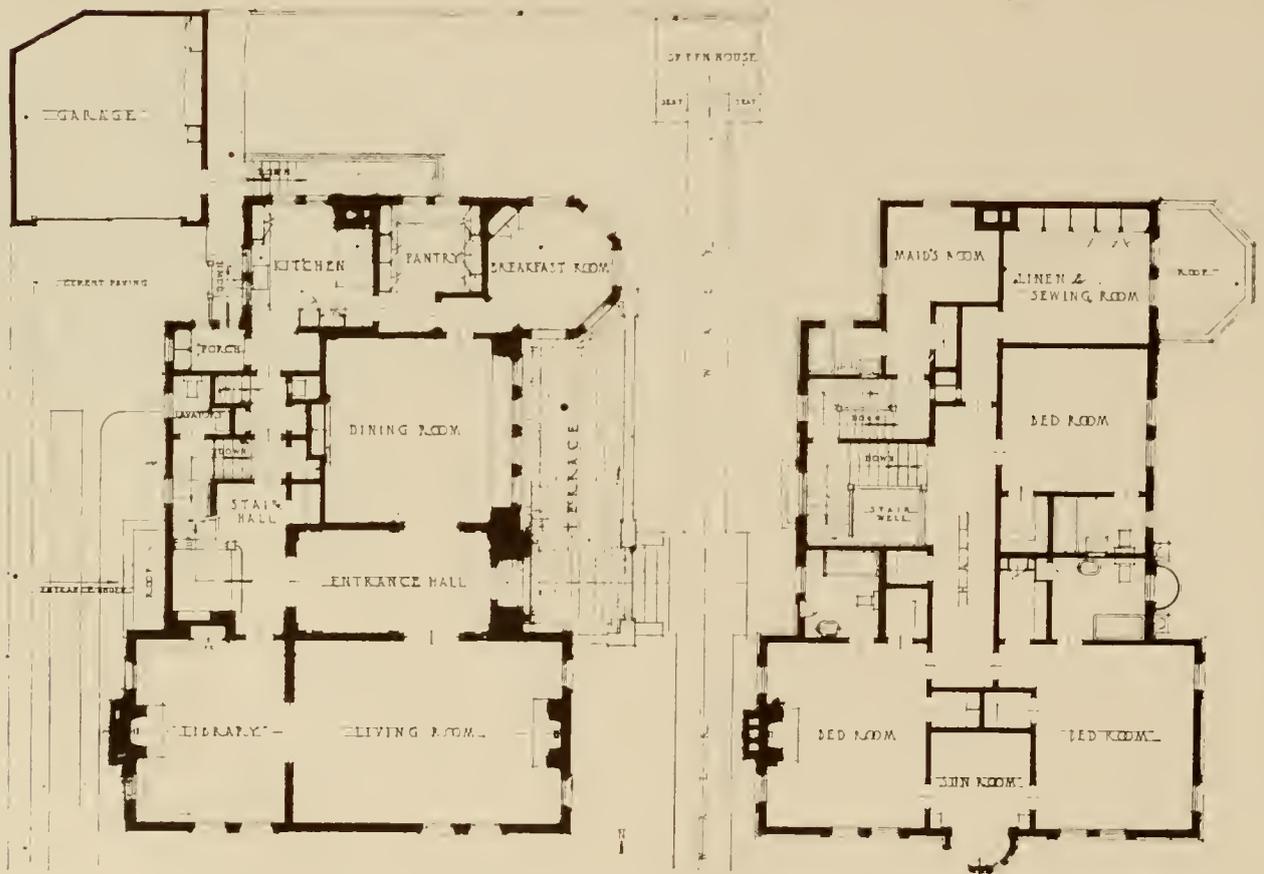


SECOND FLOOR PLAN

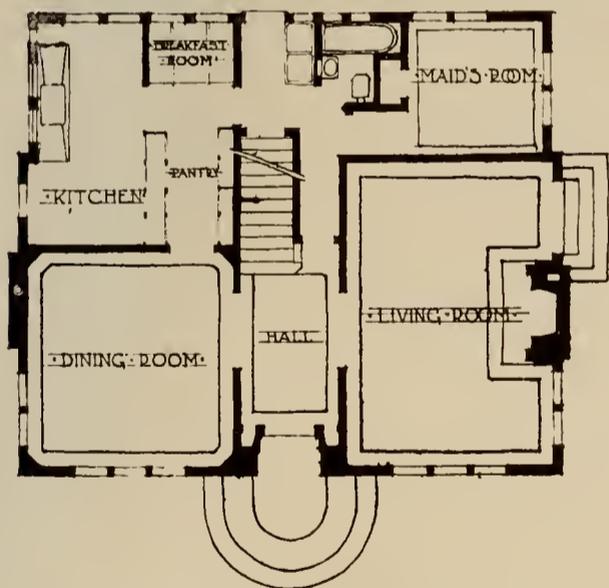
RESIDENCE OF J. H. LEIGHTON
 ST FRANCIS WOOD, SAN FRANCISCO
 HENRY H. GUTTERSON, ARCHITECT
 Photographed by GABRIEL MOULIN



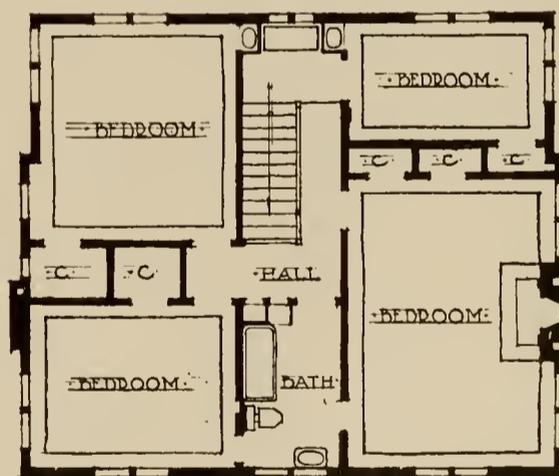
RESIDENCE OF CHAUNCEY S. GOODRICH
ST FRANCIS WOOD, SAN FRANCISCO
WARD & BLOHME, ARCHITECTS
Photographed by GABRIEL MOULIN



RESIDENCE OF J. E. WILKINS
ST FRANCIS WOOD, SAN FRANCISCO
JOHN REID, JR., ARCHITECT
Photographed by GABRIEL MOULIN



FIRST FLOOR PLAN



SECOND FLOOR PLAN

RESIDENCE OF MRS. IRMA R. LOMAX
ST FRANCIS WOOD, SAN FRANCISCO
HENRY H. GUTTERSON, ARCHITECT
Photographed by GABRIEL MOULIN



RESIDENCE OF FRANK W. PETERS
ST FRANCIS WOOD, SAN FRANCISCO
GERTRUDE COMFORT MORROW, ARCHITECT
Photographed by GABRIEL MOULIN



RESIDENCE OF DR. WM. WADLEIGH
ST FRANCIS WOOD, SAN FRANCISCO
MORROW & GARREN, ARCHITECTS
Photographed by GABRIEL MOULIN



RESIDENCE OF M. P. BROWN

HEINMAN & SCHWARTZ, ARCHITECTS



RESIDENCE OF HERMAN A. MATHERN

HENRY H. GUTTERSON, ARCHITECT

ST FRANCIS WOOD, SAN FRANCISCO
Photographed by GABRIEL MOULIN



RESIDENCE OF D. B. CHANDLER
ST FRANCIS WOOD, SAN FRANCISCO
WALTER C. FALCH, ARCHITECT
Photographed by GABRIEL MOULIN

THE GARDEN

THE DAHLIA

By A. F. SHULTE

Selection of a sunny location is of the utmost importance in growing dahlias. The soil should be worked to a depth of from eighteen inches to two feet and should be turned over two or three times before planting. A sandy soil is perhaps the most satisfactory, but any soil can be made to grow good dahlias, provided it is thoroughly spaded and pulverized. It is essential that the soil about the tuber should be loose enough to permit of free root development.

The larger types of dahlias should be planted at least 4 feet apart where sufficient room is available. The smaller types, such as the Pompon and English Single, may be planted 2½ to 3 feet apart. Unless the ground is damp, it should be well watered a few days before planting time and as soon as dry enough, the surface cultivated to remove any weeds that may have started and to conserve the moisture. Holes should be dug at least a foot deep and a foot in diameter. Larger holes are better. If the soil is very heavy, a quart of sand or a similar quantity of coal ashes should be placed in the bottom of the hole and covered with well pulverized soil to within 5 or 6 inches of the top of the hole. A handful of bone-meal should be well stirred into this soil.

It is good practice to use stakes to support the growing dahlia plant and these should be driven into the hole at the time of planting. The tubers should be planted in a horizontal position with the eyes or sprouts upward and an inch or so from the stakes. The tuber should then be covered with about an inch of soil.

As the green plant develops, the hole can gradually be filled in until the surface of the ground is level. When the plant has developed two sets of leaves, many growers pinch out the top. This has a tendency of reducing the height of the plant and making it more sturdy, which is desirable where the winds are as strong as they are in this locality. When the plant has reached a height of from eighteen inches to two feet, the stalk should be tied loosely to the stake with raffia. It should again be tied near the top when it begins to bud.

Care should be taken in dividing the clumps of tubers for planting to have one good eye or sprout on each tuber. As the

sprouts come only at the crown or point where the tubers are attached to the stalk, it is necessary to so divide the clump that a portion of the stalk will be attached to each tuber. If the sprouts have already started when the dividing is done, this greatly simplifies the dividing.

Not more than one stalk should be permitted to grow in each hill. If size, rather than quantity of flowers, is desired, this result can be obtained by thinning out the branches and by disbudding. Unless the plant produces a great many branches, thinning is not usually resorted to in the average garden, but more satisfactory results can always be obtained by disbudding all varieties, except the Shingles and Pompons.

If a handful of bone-meal was placed in each hole at the time of planting, it will not be necessary to add any other fertilizer until the plants begin to develop buds. At this time well-rotted barn-yard fertilizer should be well spaded into the soil about the plants. Standard commercial fertilizers may also be used with good results, but as many of the chemical fertilizers contain powerful ingredients, care should be taken that the fertilizer does not come in direct contact with the foliage or root system of the plant. It is well to stir the fertilizer into the soil at a distance of a foot or more from the plant.

When the plants begin to flower and active cultivation for the season is ended, a good mulch of barn-yard fertilizer, straw or grass-cuttings should be spread over the surface of the entire dahlia bed. This will tend to conserve the moisture, keep the ground from packing, and add some food value to the plants.

If the soil contained a proper amount of moisture at the time of planting and it is kept in a thorough state of cultivation thereafter, it will not be necessary to water again for at least a month. In general, it will be sufficient if the ground is thoroughly saturated once in three weeks and then cultivated as soon thereafter as the surface of the ground is dry so that it can be well pulverized. Watering can be done by irrigating or by overhead sprinkling. Overhead sprinkling serves the purpose of keeping the foliage clean and healthy and lessens the effect of attacks by injurious insects. The cultivation following each watering should be deep and thorough, except within a few inches of the plant where it should be lightly stirred so as

not to effect the developing tubers. After the plant begins to bloom and the ground has been mulched, more water will be required and it should then be applied thoroughly every week or ten days.

As soon as the plants are killed in the Fall by frost, the stalks should be cut down to within six inches of the surface of soil. They may be dug up at any time thereafter, care being taken to disturb the tubers as little as possible as the necks are easily broken, in which condition they are of no value for next year's planting. The clumps of tubers

should be permitted to dry for at least a half a day before being stored. A tag giving the name and variety of each plant should be attached to the clump before it is stored. The tubers will keep best in a cool, dark store-room where the temperature remains practically uniform during the Winter. A basement containing a furnace is undesirable for storage purposes. The tubers will generally keep better if they are stored away with the stems downward to prevent the sap from flowing down into the tubers, which frequently causes decay about the crown.

WHY SHOULD I EMPLOY A CERTIFIED ARCHITECT TO DESIGN MY HOME?

By HARWOOD HEWITT

Well,—on first thought,—I wouldn't,—if my conscience were of the twelve-cylinder, very elastic variety and I intended making a quick turn-over to a tenderfoot—

—and if the builder made a very complete set of plans showing every detail—

—and a complete set of specifications describing how every coat of paint was to be applied;—

—and the exact type of every tile—

—and with a minute description of the quality of the oak floors, and glass,—

—and how the plaster was to be put on—

—and the size of each electric wire;—

—the make of the switches;—

—and a few hundred other details;—

—and IF I knew enough about drawings and specifications to know that he had;—

—and IF I had tried the game on some one else myself and knew every quirk and twist in the game;—

—and IF I had time, with this knowledge, personally to watch every bit of work and material that went into the job—

No, I Wouldn't—No Certified Architect For Me!

I would consider the "Architecture—Engineering—Building—Real Estate—Interior and Window Decorating Co."—

—you know the expansive type of concern that puts up smart signs, "JUST SOLD", in gilt letters on every lot (except the two poorest ones)—the morning after the tract is opened;—the concern that runs a slot-machine for a complete spick and span, scientifically thought-out residence, flat or church;—the "Drop your nickel here and get a prize package" kind—

—you know what I mean—I can't think of any names right now;—well, I would con-

sider them—er—quite awhile—and then—knowing the game thoroughly, myself—

I Would Do It Myself

Now, if I should decide that maybe I didn't know quite all the angles of the game—well—probably my ancestors came from Southern Missouri or somewhere, and I may be related to a chicken thief that I read about in Judge:

"Uncle Moses was a chronic thief who usually managed to keep within the petty larceny limit. Once he miscalculated, however, and was sent to trial on a charge of grand larceny.

"'Have you a lawyer, Mose?' asked the Court.

"'No, sah.'

"'Well, to be perfectly fair, I'll appoint a couple. Mr. Jones and Mr. Brown, here, will act as counsel.'

"'What's dat?'

"'Act as your lawyer. Consult with them and prepare to tell me whether you are guilty or not guilty.'

"'Yes, sah.'

"Mose talked to the attorneys for a few minutes in husky whispers. The Judge caught only the several times repeated word 'alibi.' Then Mose arose, scratched his head, and addressed the Court: 'Jedge, yo honah,' he said, 'Course I'se only an ign'ant niggah, an' Ah don' want toh bothah yo' honah, but Ah would suttingly like toh trade one of dese yeah lawyers fo' a witness.'"

I would want a witness. I would want to trade one of these numerous departments of the building concern for an unbiased superintendent, whose wage came from my pockets directly—I do not believe in throwing temptation in the way of any honest builder. I would want to be as sure as the Lord would let me—that the superintendent was not interested in the profits of the party on the other end of my contract—because you know human nature is a tender plant and leans to-

ward the sun, the sun in this instance being his own pocketbook.

Now, in all fairness, let me say that there are varying degrees of nefariousness in the camp of pseudo-architects. I have friends in their camp. The hearts of these friends are in the camp of the honest-to-goodness architects. Only one reason keeps them out in body as well as in soul: they cannot pass the examinations to qualify as certified architects—and they have to make a living.

A Wooden Leg

Do you ask the question:

“Why the large signs:

“‘ARCHITECTURE, ENGINEERING, BUILDING, REAL ESTATE,’ Etc?”

The answer is easy and eloquent:

(1) The old name of “Building Company” fell naturally into rather odorous repute.

(2) A clever salesman is ever careful to put his best foot forward—even if it happens to be a wooden foot. They found that while the law would not let them call themselves “Architect”, what in the world was there to keep them from writing “Architecture” (and any other flattering epithets their advertising agents might think of) over their spick and span store fronts?

What is a Certified Architect?

Let me call your attention to the fact that under the law there is no other kind of an architect. A man is either a certified architect or not an architect at all.

A certified architect is a man who has a license from the State of California to practice architecture. There is an examining board. Examinations are held every six months or so.

A license does not make a demigod of any man. There are better and worse architects as there are better and worse lawyers. You must choose.

Why Is An Ideal Architect?

Answer—He isn't!

No man has yet been made who knows enough to be all that an ideal architect should be. But a few desirable qualifications he may possess:

1. He may be a poor salesman. The creative, constructive type of mind, according to Doctor Blackford, almost always is—and it is just this constructive type that will get the most for my dollars.

2. He may have a thoroughly trained mind.

3. If he has the two qualities above, he is quite sure to be honest. He is quite sure to

become so interested in my problem—as to forget how much sleep he really ought to have.

4. If he has the three qualities above, he is as interested as any nut of a scientist on the problem—as a problem—of seeing how much good he can get into a building for a given amount of money.

And I ask you is even honest John Smith as the proprietor of a building company, whose profits on my particular job depend solely on keeping down the cost of labor and material, is he, in the light of human nature, as likely to report to me, as owner, that the quality of lumber going into my building is below par—or that the type of brass fittings on my plumbing fixtures is not up to specifications—as the man described in paragraphs 1, 2, 3 and 4 above.

By way of caution, next time I sign a contract with any contractor I am going to see whether the specifications even mention the type of brass fittings.

And after all these considerations, I find that as a matter of fact, I would be paying more to that builder for his services than I would have to pay to the best certified architect in the State of California.

That is why I would go to a certified architect to design my home.

And if I would do it for my home—how much more would I do it in the case of a building for investment?—L. A. Examiner.

NORTH PACIFIC ARCHITECT'S SMALL HOUSE BUREAU

The incorporation of the North Pacific Division did not proceed as rapidly as was hoped, the committee of the Oregon Chapter having difficulty in getting the bureau actively organized. These difficulties seem to have now been surmounted and arrangements have been made to incorporate, with one of the Chapter committee members as manager of the local service.

This means getting in shape to meet the expected market arising from the Oregon state bonus loans. Although the incorporation and immediate market for small house plans is in Portland, Seattle and the State of Washington are, equally with Portland and the State of Oregon, members of the North Pacific Division, and it is hoped our Chapter members will give the project their hearty support.

In the report of the delegates to the Institute Convention, published in this issue of the Bulletin, reference is made to the report of the Small House Committee of the Institute. Mr. Alden, the Chairman of our Chapter Committee on Small Houses, went over the situation here with Mr. Brown, National Chairman, and Mr. Flagg, Director of the Northwestern Division, while at the convention. Mr. Alden also stopped at Denver on his return trip and went over in detail the operation of the Mountain Division with Mr. Fisher, the president, and Mr. Wiese, the very capable director. The Mountain Division is making fine progress.

Several books of the Mountain Division have been sent to the chairman of the Chapter Committee, to be sold on consignment, netting a commission to the North Pacific Division. Several Chapter members have already purchased these books, and others can do so by sending the regular price of \$2.50 per book to Mr. C. H. Alden, 358 Empire Building, and book will be sent them by return mail.

INDUSTRIAL

HOMES PLANNED BY ARCHITECTS

By CHARLES KEELER

*Managing Director, Berkeley Chamber of
Commerce*

Of all the composite elements of a city, the homes are the outstanding features that indicate its quality. When we survey the homes of a community we can make a fair estimate of the characteristics of its inhabitants. The American domestic architecture of thirty or forty years ago was at a deplorably low ebb. Elaborate mill-work ornaments, poor design, the lack of any sense of artistry in planning, were characteristic of the period. The reform in the architectural styles is the result of a new race of architects, trained first in Paris, Rome and other European centers and afterwards bringing the results of their studies to the universities and architectural schools of America.

If all the homes that are being built today were designed by these architects with the new training, we would have cities of surpassing charm. Unfortunately, a large number of people of moderate means feel that an architect is the one person who can be dispensed with in the building of a home. They save money by either making their own plan or leaving it to the builder. The result is, except in the case of people of unusual taste, a commonplace and inartistic structure.

The hope of our cities of tomorrow lies in educating people to the importance of employing well trained architects to design the inexpensive and modest homes. The cottage, the bungalow, the small apartment house can be made a thing of beauty by intelligent design, and a large part of every city is made up of such small homes. Prospective builders should be reached at the source. If every real estate dealer had a file with pictures of homes by good local architects and would advise every purchaser of land to employ some one of these architects to design his home, very much practical good might result.

The Berkeley Chamber of Commerce has arranged for an advisory home building committee to which prospective home builders may come for suggestions. A small library of books and periodicals on houses and gardens will be formed for reference, and ideas

(Concluded on Page XIV)

BUILDING ACTIVITIES IN THE
EAST BAY DISTRICT

By ORTON E. LUCAS

*Publicity Director, Oakland Chamber of
Commerce*

Oakland and the East Bay cities are enjoying the biggest building boom in their history. The new construction includes office buildings, factories, apartment houses and residents both large and small.

The down town skyline, as result of building already under way or contemplated in the near future, is to undergo the most striking change of recent years. One seventeen-story and one eighteen-story building are under way at the present time. In addition to these, there are a number of others ranging from five to ten stories which will be added to the down town district within the next twelve months.

In June Oakland proper with 773 permits totaling \$3,381,045 outstripped its sister city San Francisco. Those permits do not include those issued during the same time in Berkeley, Alameda or other cities of the East Bay. The permits in January of this year totaled \$1,329,405 and this was the lowest month so far this year. The July permits reached approximately \$2,000,000.

While Oakland is making this very startling gain, Berkeley set up an enviable record when it lead the entire state in per capita value of permits. Berkeley's permits for the last twelve months total \$5,561,149. A large portion of this is made up of buildings constructed on the University of California campus.

Among the expenditures for buildings at the University is \$265,000 put into the new student union building which will be ready for occupancy by the beginning of the new semester next week. \$421,000 for the new Le Conte Hall and \$15,395 for rehabilitation of East Hall. Building permits in Berkeley proper for the last eight days showed more than \$100,000 for that short period of time.

Oakland building includes, among other large factories, the new Durant factory which was put into operation the first of the present month and the addition to the Magnavox plant in east Oakland. The Chevrolet Com-

(Concluded on page XVIII)

An Article on Building For Earthquake Resistance

By SUMNER HUNT

*President Southern California Chapter, The
American Institute of Architects*

This paper is a plea to architects and building contractors to remember that in any country earthquakes are a possibility, and in some countries a practical certainty, and to consider the effect of earthquakes on the buildings they plan and erect.

Outside of the geologists, who look upon earthquakes as a more than ordinarily interesting phenomenon and not as a terrifying one, the American public, generally, including even architects and building contractors, in localities where earthquakes are prevalent are prone to emulate the ostrich who hides his head in the sand to protect himself from danger, and refuse to admit the fact of such a thing as an earthquake.

It is time we, in California particularly, admit the probability of earthquakes and learn that properly built structures will withstand, without serious damage, earthquakes of as great severity as any that have occurred here in the recorded past.

For the purpose of this article, "Class A" buildings will be but lightly touched upon, as the evidence shows that either a steel frame, or a reinforced concrete frame, engineered according to generally accepted formulae, will withstand the severest shocks; the only weakness developed in buildings of this class from poorly built filler walls and poorly secured applied facing material and ornamental features.

The simple device of using light reinforcing and good cement mortar in filler walls and ordinary care in tying in of applied facing material and ornamental features will make these buildings perfectly safe. Perhaps the ideally-earthquake-proof building is the well engineered monolithic reinforced concrete structure, in which the structural material forms the finished facing, without the application of a veneer material, but as this in street architecture is generally not sufficiently rich or decorative, the opportunity for its use does not often occur.

As to buildings other than "Class A", an almost sufficient formula for earthquake resistance would be the simple one of building well instead of poorly, using the age old understanding of what constitutes good work.

(Continued on Page XVI)

SAN FRANCISCO TO HOLD INDUS- TRIES EXPOSITION

Plans have been completed for the Second Annual California Industries Exposition to be held in the Exposition Auditorium from October 7 to 28 and will be given under the general direction, as last year, of the Central Bureau and San Francisco Program Committee of San Francisco Organizations. Angelo J. Rossi will again act as President and C. E. Baen, as Vice-President, together with an executive committee selected from the various organizations that make up the Central Bureau. Anthony A. Tresp, who successfully managed last year's Exposition, has again been selected as manager and promises to present a larger and better Exposition this year.

"This year's Exposition will be so carefully planned that the industries of San Francisco, the Bay Cities and Northern California will force attention to themselves in a manner that will impress upon the people of California the importance and magnitude of our local industries. Also, the Exposition will be one of the most important links in the Northern California movement, as will be shown," stated Tresp.

Special preference is to be given to working manufacturers exhibits who will show their products in the course of manufacture at the Exposition. It is proposed that the majority of the exhibits will be of this class.

The Exposition offices have been opened in the Flatiron Building, where the details of the huge enterprise are being worked out.

The last year's Exposition contained over five hundred manufacturers' exhibits and had an attendance of nearly one-half million. Preparations are being made to accommodate more exhibitors this year and an attendance of one million is the mark set.

* * * * *

LOS ANGELES EXPOSITION WILL BE GREAT SPECTACLE

Preparations being made by the Los Angeles Chamber of Commerce for the California Pageant of Progress and Industrial Exposition to be held in Los Angeles August 20 to September 9, indicate that the Exposition will not only be a revelation as to the industrial progress made by the West but will also provide many entertainment features that will be most unusual.

More than a thousand different kinds of

(Concluded on Page 26)

Review of Trade Literature

The Insulite Chemical Company, 373 Monadnock Building, San Francisco, have prepared an attractively illustrated booklet describing the various uses to which Insulite Mastic Flooring may be adopted. The story of Insulite from its discovery to the present time, its durability, adoption to concrete or wood construction and the economy of installation is given in detail.

The Architectural Association, Inc., London, England, announce the revival of their publication, "The Sketch Book". One volume will be published annually in two half yearly parts. Each part will contain 30 plates, 14 x 18, illustrating measured drawings of buildings and details of old buildings of architectural merit in Great Britain and abroad that will appeal to all lovers of ancient architecture and fine architectural draughtsmanship.

The Hydraulic Society has gotten out a second edition of its pamphlet entitled "Trade Standards in the Pump Industry." This edition contains some additional tables and explanatory data, also a revised list of members of the Society. Copies may be secured from the members or the Secretary, C. H. Rohrbach, 50 Church Street, New York, and if desired, in quantities, which will be supplied at cost of printing.

The National Mill and Lumber Company, 318 Market Street, San Francisco, have issued a folder describing the Pitcher Disappearing Doors, Adjustable Hangers and Frames. The folder contains several plans showing construction of the doors and the method of installation, also photos of various buildings in which this device has been installed. Copies will be mailed upon request.

The latest designs in Semi-indirect Lighting Fixtures and Bowl Hanging Devices are shown in Catalog No. G 31, recently published by the Thomas Day Company, San Francisco. A feature of this catalog is the detailed description of the T. D. Safety Lock which is adjustable to all sizes and types of bowls and to the many hanger designs. By the use of this device the bowl may be detached and replaced without danger, readjustment or tools.

Architects are sometimes at sea in writing specific paint directions. One of the best booklets it has been our privilege to read in many months is Fuller's "Home Service"

Booklet, which is intended to instruct painters, home owners, and builders in the best methods of applying paint and varnish products. This booklet is free. Application should be made to their San Francisco office.

Arthur's New Building Estimator's Handbook is the title of a book just published by the U. P. C. Book Company, Inc., 243 West 39th Street, New York. This book is 4½x7, has over 1000 pages and contains many illustrations and tables that are invaluable to the Building Contractor or Architect. This 1922 edition has been brought up-to-date and gives actual time, labor, and material required in all classes of building construction.

The McAlear Mfg. Co., 1901-7 S. Western Ave., Chicago, Ill., have ready for distribution a new 128-page catalog, No. 27, illustrating many new devices, including Individual Temperature Control Valve, Specialties for all Power Plants, Vacuum and Vapor Heating Systems, Oil Refining and Water Works Plants, Plumbing Systems and Marine Service, together with illustrations showing their application and use. The Individual Temperature Control Valve is self-contained and can be applied to any radiator, old or new, without additional piping other than the supply and return. When the thermostatic member is set for the desired room temperature, it automatically controls the opening and closing of the valve. The catalogue contains a very comprehensive detailed description of all specialties.

(Concluded from Page 25)

articles will be on display and the value of the exhibits can be estimated from the fact that they have been insured for over \$2,000,000. The grounds cover 35 acres and there will be 691 exhibition booths. Over 100 men have been kept busy for two months on the temporary buildings and in preparing the grounds.

The amusement program will be given by the New York Hippodrome Shows, the first time they have been brought to the Coast. Over 2,000 persons will participate in the entertainment features. Eight hundred voices will be heard in one chorus. The battle of Chateau Thierry will be re-enacted with 400 soldiers taking part. Twenty thousand pounds of powder will be used daily staging this spectacle.

Service

Many times in the design and construction of building, the architect or owner have original ideas which they are anxious to have carried out. This is where Service plays a preeminent part in the manufacturer or his agent's program.

When a tile roof is desired, cost is not so much a factor as are the many durable features of this form of roof covering, its beauty, its permanency, its resistance to fire and to climatic conditions. However, tile's first and most desirable feature, its beauty, may be lost by a lack of the proper understanding of its possibilities.

We have made a study of color combinations in Roofing Tile and the relation it bears to the design and color scheme of the building. This service adds nothing to the cost of the tile roof, but insures your ideas being carried out as you have planned. We are always pleased to advise and assist you in any way.

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THREE WELL-DESIGNED KITCHENS

By CLARA FASSETT

In building a house today the kitchen receives much careful consideration as regards size, lighting and location. Where possible it is planned to look out on a pleasing bit of outdoors, as next to a dark kitchen, one which looks upon a blank wall is an uninspiring place in which to carry on the most important branch of home-keeping.

To-day the kitchen has reached the stage where a happy balance is maintained between the good old-fashioned qualities of cheerful, attractive coziness and the latest ideas in convenience, sanitary plumbing and labor-saving equipment.

The kitchen is a "show-room" in every one of the big series of modern, model homes

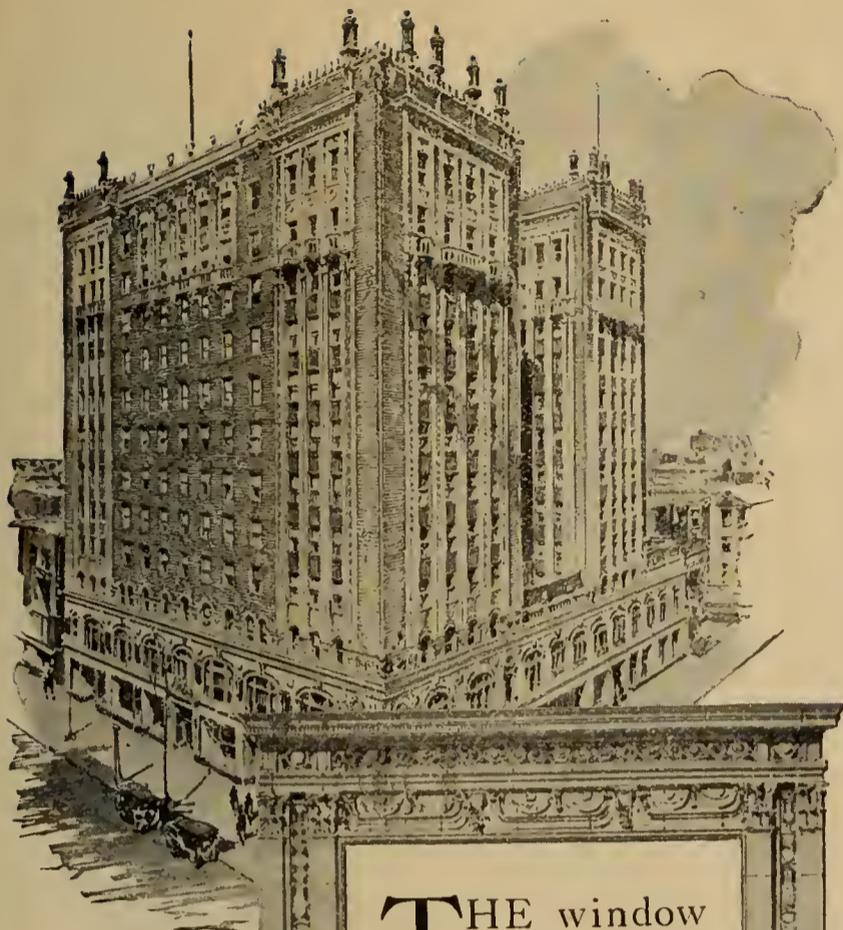
Harry W. Isaacs has built and is building in beautiful Maxwell Park in Oakland.

A typical "Isaacs" kitchen is pictured above. Complete and compact it is, with built-in cabinets, shelves, bins and cupboards furnishing it entirely except for the stove.

Every detail was given careful consideration from the planning of the location in the house, to the minutest refinements of finishing.

It is separated from the dining-room by a swinging door, this feature of convenience being an important consideration in the present day servantless home. It has a southern exposure with light from the east through the breakfast room, so that it is always sunny and well-lighted as the housewife's "laboratory", where she spends the most of her

(Continued on page XIII)

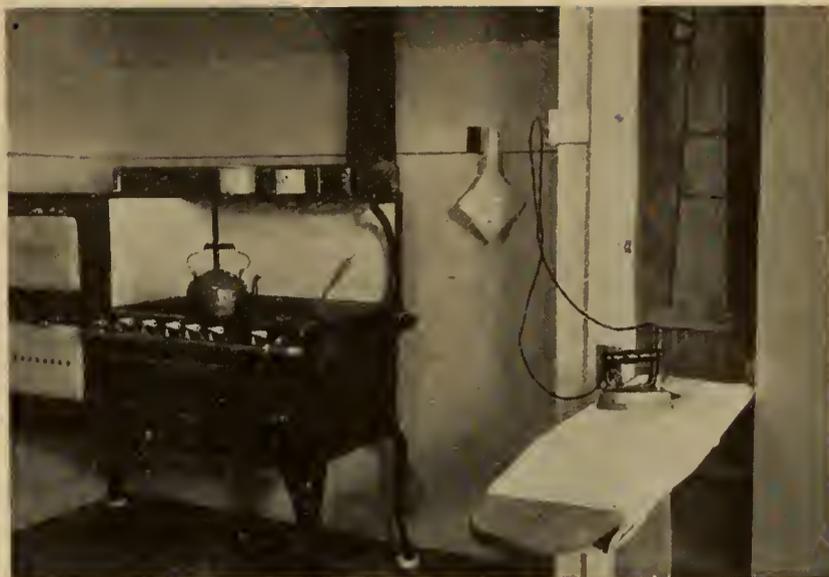


Sheridan Plaza Hotel
Chicago, Ill.
Architect,
Walter K. Ahlschlager
Glazed by
Harp, Partridge & Co.

THE window glass throughout this hotel is a product of the American Window Glass Company.

American Window Glass is distinctly a quality product, made to meet exacting requirements both in double or single strength. Its evenness and freedom from imperfections invariably win its preference.

One of the refinements that give distinction to such fine buildings as the Sheridan Plaza is the glass used in its windows



(Continued from Page 28)

time, should be.

The walls and woodwork are enameled in lead grey, and the inlaid linoleum, which is laid by the builder, is in harmonizing tones of blue, grey and tan colors which are bright and cheerful but not easily soiled.

Happy indeed is the placing of the large window revealing a broad panorama of San Francisco Bay. Underneath this window reaching along its full length is the white tiled sink with handy knife drawer in the face-board. Underneath is a large compartment for storing pots and pans. The hand-towel rack is well placed at the end of the sink, and rack for dish-towels completely out of sight beneath.

Conveniently placed, with relation to the housewife's drain-board "work-bench" are the cabinets for dry groceries at the far end of the sink, and the cooler, which really cools at the other end.

Among other features are the big cabinets

(Continued on page XIV)



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EVERLASTING	USE IT

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MANUFACTURED AND DISTRIBUTED BY
SIMONS BRICK COMPANY
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PHONE: MAIN 126



(Concluded from Page XIII)

for dishes and storing jams, jellies and preserves; the wide-work-shelf, mixing board, bins and drawers below; the telephone placed near at hand, where the housewife needs it, and the shelf and gas connection (which does not show in this illustration) in the entry

way, where a gas plate may be placed, and frying done without filling the kitchen with smoke.

(Concluded from page 24)

and lists of local architects will be furnished those who are contemplating building. Among the publications to be kept for consultation will be the Building Review which is full of charming pictures and suggestions for artistic homes.

Ceaseless educational work is necessary to convince people that architecture is the art which most closely touches their daily life. Money invested in a good architect will do more to refine, enrich and elevate the average home maker than any other one expense that could be incurred. If all our Chambers of Commerce would carry on campaigns to teach people the personal and community value of architecturally designed houses, it would be a real forward step in the cultural advancement of America.

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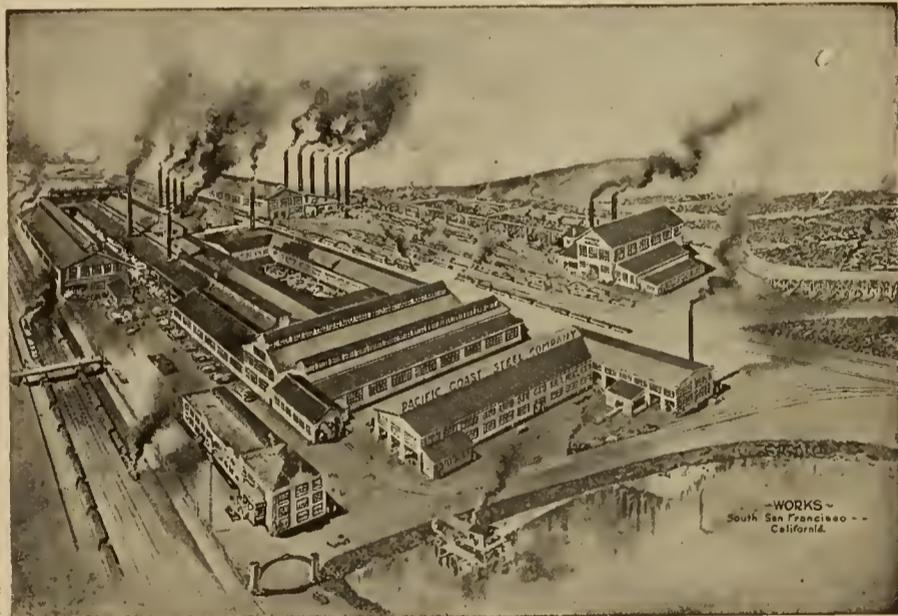
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(Continued from Page 25)

In masonry walls, for instance, it is always the walls built with poor mortar that crack or fall. A good story illustrating the soundness of the good work formula comes from a committee sent some years ago to Imperial Valley to investigate the results of an earthquake there. The committee noted a considerable number of complete wrecks of buildings, built of cement blocks for the outer walls, and also noted other buildings of apparently the same construction that showed little or no damage. Investigation brought out the fact that these buildings; the wrecked ones and the ones standing in good condition, were all built by the same contractor, but the buildings in good condition were built by the contractor for himself. The moral is obvious.

As to details of good construction for earthquake resistance, we will start with foundations. They should be deep enough and heavy enough to insure against settlement and to give something to which to tie the superstructure. In all frame buildings bolts should be built into walls. The mud sills should be firmly bolted down and joist and studding thoroughly spiked to sills. There are many instances of frame buildings having been thrown off the foundations at corners with of course a resulting dropping of the frame which, in cases of poor framing in superstructures, caused bad wreckage.

In the case of the common forms of vertical wood underpinning, on detached piers, the wood caps should be bolted to masonry and there should be sufficient lines of vertical diagonal bracing in two directions to insure the whole building moving as one mass, as the action of an earthquake takes the form of pulling the foundations out from under the superstructure, and if the building is so built that this is not possible a great element of danger is eliminated.

If the common method of frame construction, that of building one story at a time, is used, the upper story should be thoroughly spiked to the story below, this again to prevent the lower story moving out from under the upper. The roof construction also should be well braced and tied to the story below.

The same amount of diagonal bracing and bridging and tying that a good builder puts in for wind bracing and general stiffening will insure the requisite stiffness to withstand an earthquake shock.

In brick construction, there should be more cement used in common brickwork than

is customary. One should know that bricks are wet before using and that the brickwork is well bonded and that the cement goes into the mortar. As stated above, it is the poor masonry that goes to pieces in an earthquake shock.

More care should be taken to thoroughly anchor joists to brick walls. Some builders will fairly well anchor end joists and be careless about anchoring parallel joists, forgetting that the wall needs the bracing given by the floor just as much as the floor needs building so that it will not slip off the walls.

In the case of large roof spans, avoid the scissors type of truss! Be sure to get straight bottom cords to trusses and have them well bolted into walls. In the San Francisco earthquake there were some notable cases of power houses with high walls and long roof spans, with straight bottom cords, that withstood the shock splendidly. Any form of truss or roof that, under a shock, will develop a vibration of the main strut member has a tendency to push out the supporting wall.

The commonest visible evidence of damage from earthquake is in chimneys. Japan, where earthquakes are, one might say, an every-day occurrence, solves that problem largely by not building chimneys, but so much of the sentiment of home to the Anglo-Saxon is built around the fireplace that it is almost indispensable, and it is not easy to build a chimney high enough above adjoining roofs to insure draft and at the same time make it earthquake-proof. If, however, we would build at least the end walls of our common chimneys 8 inches thick instead of 4 inches and build into these walls, at each corner, a one-quarter inch vertical iron rod with an occasional bond iron running entirely around the chimney and avoid the use of too much corbelling in the tops and use good cement mortar, we will have a chimney that will stand a stiff shock. Terra cotta flue linings tend to stiffen the chimney and reduce the danger from fire, due to cracks in the main walls, caused by an earthquake.

More care should be taken to curtail the height of street facade fire walls and in tying walls back to roofs.

More care should be taken to avoid unnecessary projection in cornices and to thoroughly tie same into supporting walls and to thoroughly support and tie in all ornamental features.

I would discourage the use of common

form of hollow tile walls and partitions, I mean the form in which the only bed for mortar is the end web of the tile. If this form is used it should be reinforced.

There should be a state law that would provide and enforce a checking of plans for masonry buildings in small towns where there are no building laws. It is an unquestionable fact that the damage from earthquakes is more pronounced in such towns than in the larger cities where building is done under the supervision of a competent building department.

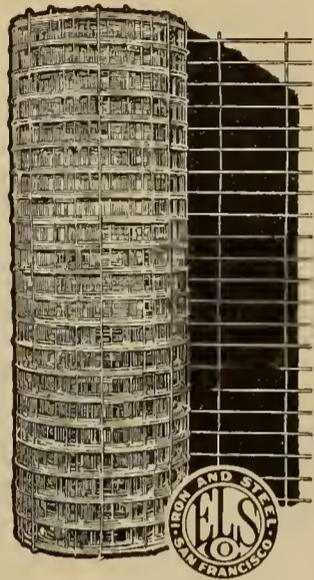
It is probable that the shocks of June, 1920, in Los Angeles, were very nearly as severe as those of May of the same year in Inglewood, yet the damage at Inglewood was out of all proportion greater, due undoubtedly to poorly building structures, which were built on the go-as-you-please by contractors who perhaps did not know what really constitutes good building.

The establishment of district offices where builders from adjoining small towns would go for building permits would hold down the cost of such state supervision to a sum which, considering the danger due to present careless methods, we could afford to pay.

In conclusion, this article is not intended as a technical treatise on the details of earthquake resistant construction, but rather, while calling attention to some of the simpler principles of such construction, is more of an urgent plea to all architects and builders to impress upon themselves the fact that earthquakes are possible anywhere and probable in many localities and to ask them to take the subject seriously and to so build as to minimize the dangers resulting from earthquakes and to remember that a good simple formula for earthquake protection is *Build Well!*

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(Concluded from Page 24)

pany has announced plans for the doubling of its plant and the Star Company is preparing to start construction at an early date.

While these major buildings are underway, literally thousands of bungalows are being constructed. In one small tract, Maxwell Park, work was going on simultaneously on 65 bungalows this week. These homes are being sold as rapidly as completed. Those closest in touch with the building activities predict that 1922 is but the beginning of a long period of building and that Oakland is destined to register a ten year gain which will put it above the half million mark in population.

Southern California Architects==Arthur Kelly

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BUILDING REVIEW



SEPTEMBER, 1922

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The BUILDING REVIEW

VOL. XXII

SAN FRANCISCO, SEPTEMBER, 1922

No. 3



COVINA, CALIFORNIA

RESIDENCE FOR MR. BENJ. THORPE

ARTHUR KELLY, ARCHITECT

Southern California Architects

Arthur Kelly, Designer of Homes

BY HARRIS ALLEN

In reviewing the work of an architect, it is a refreshing experience to find a man who is not bound down to one stereotyped style, no matter how successful the result. Mr. Arthur Kelly shows much more than mere versatility in the great variety of his designing. He has considered each problem as individual, and has brought to its solving an unprejudiced mind, a cool and discriminating judgment; and underlying these is that *sine qua non*, an instinct for composition, for proportion and balance and scale.

Granted an adequate knowledge of architectural styles, which in this case is indis-

putable, there are bound to be interesting results. Before commenting on these results more definitely, let me give in Mr. Kelly's own words how he approaches these problems:

"I have always had the theory that if my client had the knowledge and training of architecture such as I have, he would be able to develop his own problem better than anybody else. In approaching the problem of developing the thing best suited to the location, and to the requirements as laid down by the client, I have, therefore, tried to think of the house as he thinks of it; in other



RESIDENCE OF MR. SAYRE

LOS ANGELES, CALIFORNIA

words, to put myself in his place, and with my knowledge of planning and design, to develop the house as he would develop it if he knew how to do it as I do.

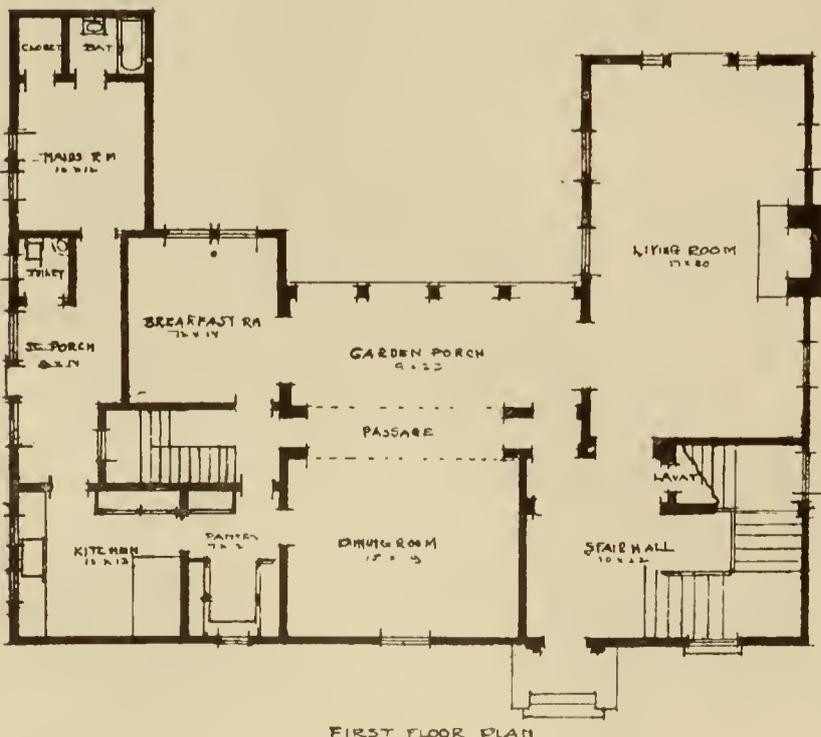
"I have found that even among the people who think they have a very meagre idea of what they want, nearly all of them have a pretty clear idea regarding their requirements, if they can only be made to express it. It may require a good deal of questioning and diagnosing, as it were, but in the end I find that I can get a pretty clear picture of what and how they are thinking about their house.

"Another thing that I have learned is that nearly all clients have a fairly strong appreciation of good architecture, and good planning, if they can only be made to see that it is good. People generally lack the ability to visualize a thing before it is built, and they are governed in their ideas by

things they have seen; and it is a very difficult problem, as you know, to work out anything good, if it is based on a lot of different ideas, which may have been gathered from various sources.

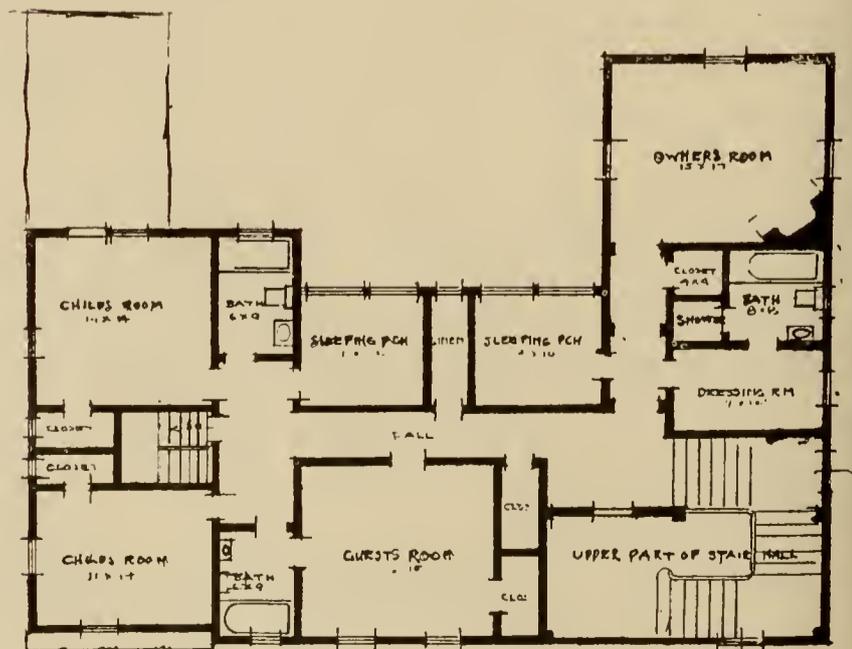
"I find that the client who has been browsing through books and magazines, without and pre-conceived idea of style, will get his styles very badly mixed, and that it is often difficult to keep from spoiling your house by a mixture of styles. However, if he can be made to appreciate the value of keeping to a style, and not making a mixture or jumble of different styles, one can usually develop a very creditable house.

"There seems to be a general feeling among the laymen that the architect will not let them have what they want in their house, because it will spoil the architectural effect of it, or some such thing as that. My notion has always been to get exactly what



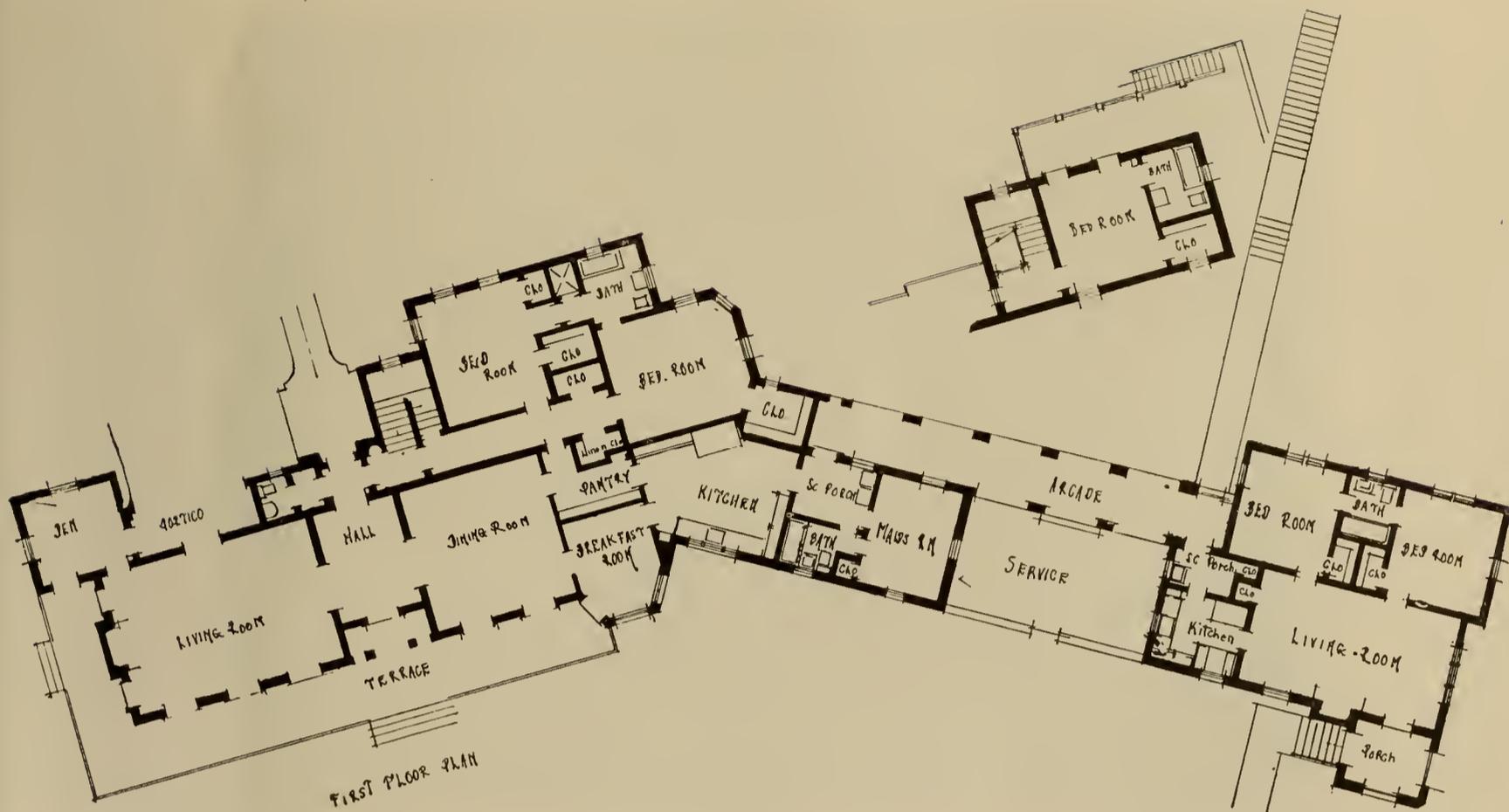
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RESIDENCE OF MR. SAYRE

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my clients want in their houses, but to do it in the proper way, so that there can be no objection from an architectural standpoint. I have found that an idea expressed by a client usually had some merit, from which I could develop some detail of plan or construction, which would be architecturally correct and still give the client what he wanted. In other words, most ideas have some good in them, and the architect's problem is to find that good and develop it into something worth while."

Perhaps the most striking characteristic of Mr. Kelly's work is, paradoxically, its reticence. There is no obvious or pretentious striving for effect no desire to advertise the architect at the expense of the building (and at the client's cost).

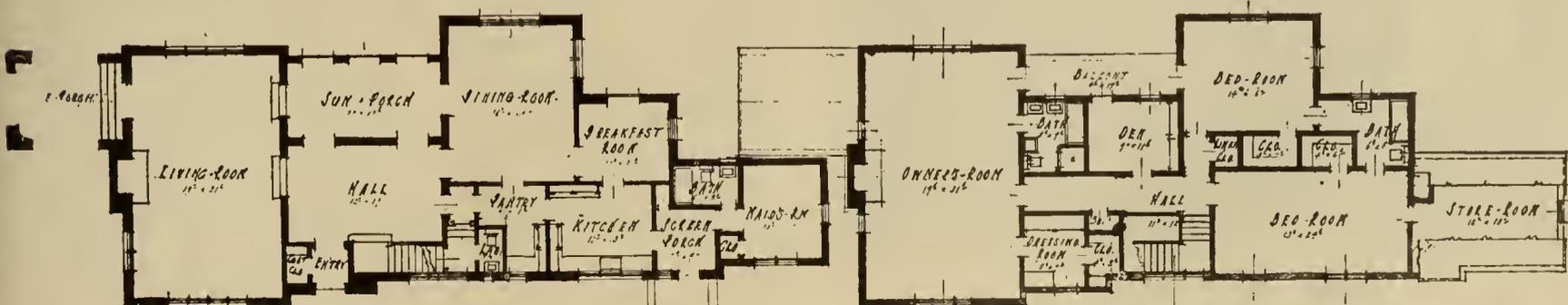
In all these examples, with one possible exception, there is evident a dignity, a tranquil good taste and refinement, which affects the observer as assuredly it must influence the inhabitant.

Against the detail shown of the Hershey

house entrance may be brought to a criticism as to design and scale; it is a charming tour de force, somewhat too "expositiony" for a private residence. One surmises this was done at the client's behest; and can hardly blame him for enjoying its vigor and exuberance.

In general there is an intelligent development of the traditional. It has been said that the traditional is the survival of the fittest. I feel safe in predicting that this work will survive when many more flamboyant and assertive types, now being flirted with, shall have lost their ephemeral popularity. Mr. Kelly has built upon a sound basis of traditional axioms, applied to modern and individual requirements. If any one thinks this is bound to result in dull imitations of the past. I advise him to go to Los Angeles and be converted.

The houses illustrated may be divided into two general groups; one designed along the Italian-Spanish-Mexican traditions, the other English and Colonial.



RESIDENCE OF MR. WAITE

LOS ANGELES, CALIFORNIA



GARDEN PORCH, ARTHUR LETTS JR., RESIDENCE LOS ANGELES, CALIFORNIA

In the first group are the Muma, Hershey, Brotherton, McCoy, Davidson, Marshall, Thorpe and Sayre houses; in the second, Waite, Letts and Kirkley.

Good scale and balance in its voids and openings characterize the Muma house. The rich, but restrained ornamentation of its doorway makes a typical contrast to the plain broad wall surfaces. This building is exceedingly effective in its good proportion, solidity, harmony of color; its street and garden fronts are clearly expressive of their differing functions, and the high-walled garden forms a delightful and essential part of the house itself.

In all these homes, incidentally, provision is made for garden porches or loggias or terraces, which serve to connect the indoor and the outdoor life. Especially close is this connection in the case of the Brotherton house. It grows from the ground; doors and windows do not shut out, but include the garden in the life of the house; the horizontal lines of roof and moss settle it all the more firmly. Its lofty living room might be called a vestibule to the garden, were it not for the unusual charm and distinction of this room. It is a "Great Hall," without the wanted stiffness and formality of apartments usually so labeled.

The McCoy, Davidson and Marshall houses are restrained almost to the point of severity. Void of ornament, plain in outline, they are still not uninteresting, for the same sense of proportion shown in the more picturesque houses saves them from the awful fate of "innocuous desuetude."

I confess to being bowled over completely by the design of Mr. Thorpe's home at Covina. It disarms criticism by its ingenuous simplicity. Admire the art, which preserves balance, but avoids too rigid symmetry. There is a fascination to this long, low Spanish farm-house, which few buildings, great or small, possess; it is not to be conveyed by words. You must "feel" it in your architectural nerve centers.



RESIDENCE OF MR. MARSHALL
LOS ANGELES, CALIFORNIA



LIVING ROOM, KIRKLEY RESIDENCE

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Much of the same unaffected charm is possessed by the Sayre house; there is a similar feeling, a mutual background, although the composition is so different. This building—shall we call it a hacienda?—wanders around in a quaint hap-hazard way on the hillside, with all sorts of wings and angles and varied roof lines—like Topsy, it appears to have “just growed.”

Years ago, in the primitive days before the big fire, some local architect published a pamphlet illustrating divers houses, with most original accompanying comments. Of these, one sentence has stuck in my memory: “This house is the Rambling Picturesque Style of architecture.” The description might have been made to order for this informal and inviting structure, although it might surprise Mr. Kelly to learn the style in which he had been working.

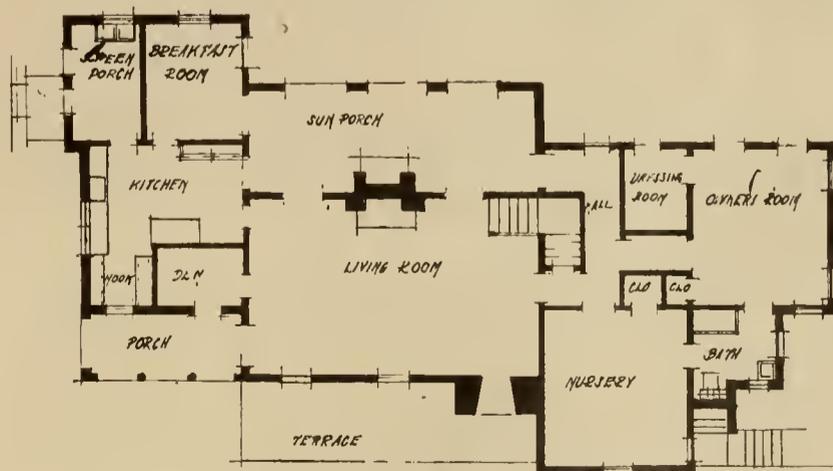
The Waite and Letts houses, with their clean, vigorous lines, make one think of Guy Dawber and Baillie Scott and others of that live bunch of modern English architects. This is sane, straight forward work; the exterior expresses the plan well, accenting the important elements. The masses are sturdy and well balanced, the details appropriate. Observe the doors, beautifully paneled, with wrought iron grilles over the peep-holes. Lawns and planting are in excellent keeping with the architectural scheme. The coloring is very pleasant; weathered gray-green finish,

creamy tan stucco, shingles in varying shades of soft moss greens, tans, browns.

The interior vistas are interesting; you see glimpses of rooms beyond, partly hidden, partly revealed. Some one once said, “A good plan is all the better if it contains a little day dreaming.”

The Mount Vernon tradition is well carried out in Mr. Kirkley’s home, even without the curving wings. With red brick walls, white woodwork and green blinds and roof, this house makes a lovely picture, framed with foliage and flowers and lawn. Both outside and in, the delicate, refined detail is in keeping with the spirit of this period. The propriety of putting a Virginia planter’s homestead in a California city may be questioned; but if you drive by at dusk where the two lanterns by the door are throwing X-rays of light over the red brick walls and

(Concluded on Page 36)



RESIDENCE OF MR. BROTHERTON
LOS ANGELES, CALIFORNIA



RESIDENCE OF DR. THOMAS DAVIDSON HOLLYWOOD, CALIFORNIA ARTHUR KELLY, ARCHITECT

EDITORIAL

The Building Review takes pleasure in announcing that this issue constitutes the first of a series to be devoted to the work of Southern California architects. The architecture of the south has become so distinctive, its quantity and virility are so extraordinary, that incidental illustrations are entirely inadequate for appreciation of its importance.

As between classification by types of buildings, and by architects, we have chosen the latter method, believing it to be more satisfying to both reader and architect. The output of many individuals has been so great that even this will not suffice to give a comprehensive review of their work; but the complete series will give a much clearer and broader understanding than has heretofore been possible, of the character and extent of architecture in Southern California.

On September 28th, of this year, an exhibition will start in Oakland, which is unique and will unquestionably have a great educational value.

The California Complete Homes Exposition is to consist of ten homes in Lake Shore Highlands, reached directly by the Key Route Ferry, by street car and automobile. These homes were designed by architects, completely furnished by high-class firms,

with full electrical equipment and other modern conveniences, and with gardens surrounding each home, laid out by experts.

During the three weeks period of this exposition a series of lectures on home building and furnishing will be given; there will be exhibits of household arts, and there will be days for special interests and organizations.

By a conservative estimate, 100,000 people will visit these homes. Such an enterprise needs no kind words, but mention is well worth while as a suggestion to other communities.

The American Institute of Architects—California—and the San Francisco Chapter, are to be congratulated on the choice of William B. Faville as national president. His election is a tribute to his superior qualities as a man and an architect; but it means more than this.

It means recognition of the architectural development of California, and its importance in the national progress in art.

And it means that the building profession now recognizes that this country is a unit, ocean to ocean, and we in the west are not colonies, taxed, but not represented; that the wholesome co-operation of all parts of the industry is so much the nearer of realization.



RESIDENCE OF DR. JAMES McCOY
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THE GARDEN



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LIVING ROOM FIREPLACE



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THE STAIR HALL

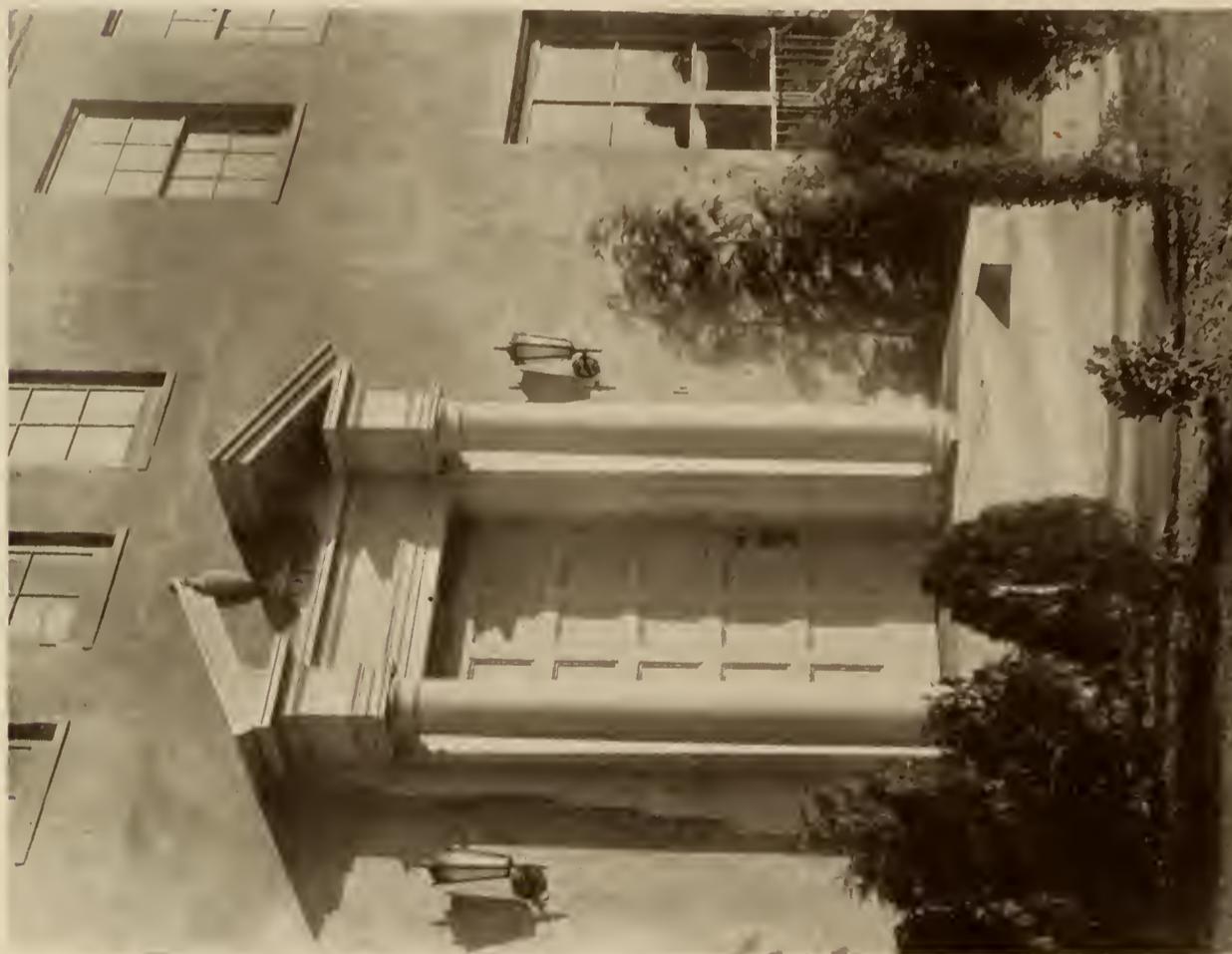


STAIR BALCONY FROM GARDEN

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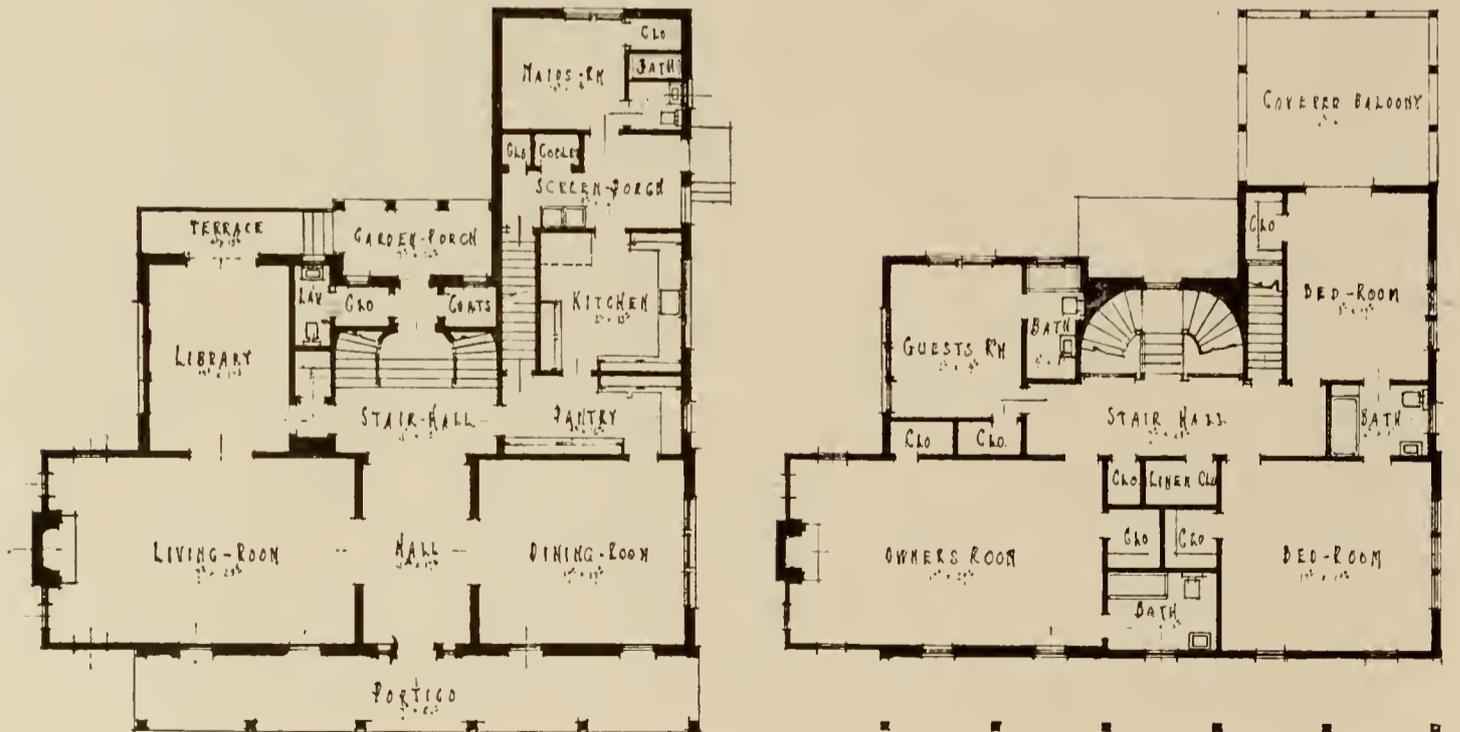
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THE GARDEN

PREPARATION OF GARDEN SOIL*

By PROF. E. J. WICKSON

The subject assigned to me, "The Preparation of Garden Soil," has two aspects. It suggests tillage which is to get ready such soil as one may have so that things can be planted in it. It also suggests preparation of the soil itself so that the best results can be attained through tillage. The latter aspect will be chosen for comment because it is more fundamental.



GARDEN DETAIL, TRIGG GARNER RESIDENCE

The service of the soil to the plant is also two-fold:

- a. To hold the plant by affording opportunity for root extension and anchorage.
- b. To furnish conditions and materials which will enable the plant to grow.

The plant in the soil is not like a candle in a candle-stick; it is more like an electric bulb in its socket—being not only held in place but furnished with "current" of all things needful for service and delight to man.

Both contributions of the soil to the plant are promoted by the same soil-characters and

soil-contents in their proper relations to each other and to the requirements of the plant. These characters and contents may be called "soil-conditions." To secure such conditions and relations is therefore the supreme requirement in the aspect of soil-service to the plant, which we have chosen for consideration. These conditions are:

Mellowness—which enables the plant to make free enlargement and extension of its roots because the earth particles are easily pushed aside.

Retentiveness—which holds moisture which is indispensable to the growth.

Airiness—which promotes aeration of the soil which is directly essential to most plants—and indirectly also because it is necessary to the growth of minute organisms which render soil-substances available to the plant.

Richness—which means abundance of things acceptable in the dietary of the plant.

All of these four soil-conditions must be amply present to secure the optimum development of the plant—though each kind of plant has its own notion of what degree of amplitude serves its purpose best—but none of these conditions should be present in excess, for if any one of them either falls short or passes beyond the requirements of the plant it cannot thrive. Therefore these four conditions must exist in moderation and best conditions are mediums between extremes of which the soil is capable, viz:

Mellowness is a medium between hardness (which is produced by too much clay or fine sediment which is disposed to cement)



GARDEN DETAIL, LEONARD B. SLOSEM RESIDENCE

*Courtesy of Alameda County Garden Club.

and softness (which is produced by too much sand or coarse sediment or other materials in coarse particle. Mellowness may be gained directly by mixing together the materials which cause the extremes noted; also by adding to one or the other of the extremes certain substances which will be mentioned presently.

Retentiveness is a medium between conditions which favor extremes in moisture-holding and in moisture-losing, viz: the medium between soil-saturation and soil-dessication. This medium is gained by securing mellowness and by enabling mellowness to do its perfect work by both drainage and irrigation.

Airiness is a medium between no air-movement (caused by having the soil windows shut) and too much air-movement (occurring when plants are, as it were, lodged on sleeping porches because the soil particles have too large spaces between them. Proper or medium airiness is secured by mellowness assisted by good cultivation.

Richness is a medium between a deficiency of plant-food and an excess of it and is gained by liberal but not excessive manuring. The best results of liberal manuring are only attained when mellowness, retentiveness and airiness are all at their best degree for service to the growth of the plant which is then at its point of highest efficiency in the use of plant food.

We have thus seen that the best degree of retentiveness and of airiness and the best use of plant-food are all conditioned upon mellowness. To paraphrase Solomon, mellowness is the principal thing; therefore get mellowness. In the preparation of garden soil mellowness may not be *sine qua non* but it surely is *sine qua minime!*

To summarize then: Mellowness promotes root action which causes free top-growth, large leaves and grand flowers.

Mellowness favors free reception of water of which it holds fast that which is good and quickly releases all the rest.

Mellowness welcomes sufficient aeration and excludes excess.

Mellowness promotes highest efficiency of fertilizers.

Things to do to secure mellowness:

a. Of hard soils. Add sand; coarse manure; dig in straw, sawdust, sifted coal ashes; garbage capable of decay (but not too much in a place); practice deep and frequent tillage and apply quick lime after the first rains.

b. Of sandy soils. Add clay or adobe; well decomposed manure or manure finely ground by the manufacturers; dig in green weeds and other succulent vegetable refuse but no coarse, dry stuff of any kind; practice shallow cultivation for weed killing and to keep a friable surface; apply powdered gypsum or ground lime-stone instead of quick lime; be sure that sufficient irrigation is given and at short intervals.

CHRONOLOGY OF CHIEF FURNITURE DESIGN PERIODS

ENGLAND

Age of Oak

"Gothic"—Edward IV—1461-1483; Edward V—1483; Richard III—1483-1485.

"Tudor Gothic"—Henry VII—1485-1509; Henry VIII—1509-1547.

"Tudor"—Edward VI—1547-1553; Mary—1553-1558.

"Elizabethan"—Elizabeth—1558-1603.

"Jacobean"—James I—1603-1625 (Inigo Jones); Charles I—1625-1649 (Sir Christopher Wren); Commonwealth—1649-1660 (Grinling Gibbons).

Age of Walnut

"Stuart Carolean," of "Late Jacobean" (part of the Jacobean period) Charles II—1660-1685; James II—1685-1688.

"William and Mary"—(Dutch Influence) William and Mary—1689-1702.

"Queene Anne"—Anne—1702-1714.

Age of Mahogany

"Georgian"—George I—1714-1727; George II—1727-1760 (Chinese Influence) (Chippendale's book—1754); George III—1760-1820 (Adam Brothers) (Angelika Kauffmann) (Pergolesi) (Heppelwhite's book—1789) (Sheraton's book—1791).

"Debased Empire"—1820.

FRANCE

"Flamboyant Gothic"—Louis XI—1461-1483; Charles VIII—1483-1498; Louis XII—1498-1515.

"Francois Premier"—Francis I—1515-1547 (Italian Influence).

"Henrix Deux"—Henry II—1547-1559; Francis II—1559-1560; Charles IX—1560-1574; Henry III—1574-1589.

"Henri Quarte"—(Dutch, Flemish and German Influence) Henry IV—1589-1610 (Boullé).

"Louis Treize"—Louis XIII—1610-1643 (The Gobelins) (Le Brun).

"Louis Quatorze"—Louis XIV—1643-1660.

"Regency"—Regency—1715-1722 (Watteau).

"Louis Quinze"—(Chinese Influence) Louis XV—1722-1774 (Pococo).

"Louis Seize"—Louis XVI—1774-1793.

"Decadence of Art"—Revolution—1793-1799.

"Empire"—Napoleon—1799-1814.

(Concluded from page 33)

silhouetting the slender posts of the front portico, you could not possibly regret the creation of such a charming picture.

Los Angeles is fortunate to possess men like Mr. Kelly, who are not carried off their feet by the speed and extent of development, but give the study and pains-taking care necessary to make each building a satisfactory solution of that particular problem.

THE BUILDING REVIEW

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COMMENTS ON THE ARCHITECTURAL SITUATION IN LOS ANGELES

By SUMNER HUNT

President of the Local Chapter of The American Institute of Architects

When I am asked to comment on the characteristics of Los Angeles architecture, I think first of the small house, in the development of which I believe we lead the country. There is no city of our approximate size in which so large a proportion of the small house builders have endeavored to create beauty and individuality. I am never quite sure which of those two qualities is the strongest underlying motive, but observing the "jazz" architectural growth of the last few years, I am afraid the desire for individuality is submerging the aesthetic.

The desire to do something different from the "dry goods box" architecture which prevailed in our small houses throughout the country for half a century was admirable and to be expected of the people who had cut loose from the habits and customs of the conservative East, but I fear we are running wild and overlooking the basic principle, which, as I take it, is that beauty to be real and lasting, in architecture at any rate, must be based on utility and reason, and certainly there is little of either in much of the small house work now going on, particularly the plastered exterior, partially tiled roof, poorly built small house of today, and I would like to make an earnest plea, particularly to the speculation builder, to "Stop—Look and Listen" before rushing on in the mad effort to outdo one another in creating something strikingly different, lest we find ourselves a "joke" in the eyes of the well-informed people of the rest of the country.

When we come to a consideration of the more costly residential growth, we find an uncommonly large percentage of really well built, well designed houses of unusual interest, set in beautiful grounds, the whole effect making a development of which the public and the architects who create them have every reason to be proud.

In our down town commercial building, we are well up to the best standards, except that we have too few building where the owners have been willing to let their architects create beauty for beauty's sake, beyond

(Concluded on Page XVI)

INDUSTRIAL

STOCKTON TO BUILD, MUNICIPAL AUDITORIUM, CITY HALL AND UNIVERSITY BUILDING

More than \$2,000,000 worth of building has been done in Stockton since the first of the year. This figure is by far the largest in the history of the city for the corresponding periods and assures a record-breaking year.

During 1920, the best previous building year in Stockton, permits totalling \$2,617,527 were issued. The figure for 1922 already equals this total.

A striking feature of the building development has been in the fact that it has not been confined to one class of construction. Building of all classes have been erected. They include business blocks, apartment houses, dwellings, schools, churches and every class of building.

The fall months of the year will show no slackening of the pace in the city. Besides work which is now under construction and will not be completed for several months, a promising program of new work is scheduled. One of the most important structures to be started is the Municipal Memorial Auditorium. Plans and specifications have been adopted for the building, a site selected, and

(Concluded on Page XIII)

SEATTLE INDUSTRIAL OUTLOOK

With a marked upward trend in lumber production, building construction and consistent improvement in general business activities, Seattle again demonstrates her stability as the commercial center of the Pacific Northwest.

In the lumber industry, which represents more than 60 per cent of the industrial activity of the Puget Sound region, production is far greater than a year ago and the lumber cut now, despite rail strike and lack of cars, is above normal with new orders equalling production. The outlook for an active lumber market for a long time is very bright.

The valuation of Seattle building permits during the first eight months of 1922, is

(Concluded on page XIII)

FRESNO TO ERECT MILLION DOLLAR HOTEL

There is every indication that 1922 will be the banner year for construction for the city of Fresno.

Total permits for the year to September 1, amounted to \$5,265,000.00, with several large buildings announced for which plans have not yet been drawn.

Two large office buildings are now nearing completion. The Brix Block, located on J Street, between Fresno and Merced, will be ready for occupancy within a month. This is a six-story class "A" structure building of reinforced concrete. The new Patterson Block, replacing the old Forsyth Building at J and Tulare Streets is 50 per cent completed. This is an eight story, reinforced concrete building, and will be devoted to offices and exclusive retail stores.

Announcement is also made of the San Joaquin Light & Power Building, a ten story structure on the corner of Merced and J Streets.

Barker Bros. Furniture Co., have been excavating for building adjoining Roos Bros., also on J Street.

On October 15, construction will begin on "The Californian"—Fresno's new million dollar hostelry. This business will require practically a year for completion.

NEW STATE BUILDINGS UNDER CONSTRUCTION IN SACRAMENTO

When it was announced at the close of 1921 that Sacramento's building permits totaled \$4,772,000 for the year the people of Sacramento figuratively whistled. The total was more than \$1,000,000 above that of any of the 10 preceding years. Sacramentans felt their city starting on the up grade. They realized that the increased efforts of their enlarged Chamber of Commerce was showing results.

And now the building figures for 1922 show their conclusions were correct. The value of Sacramento building permits for this

(Concluded on Page XVIII)



RESIDENCE OF MRS. A. B. SPRECKELS

G. A. APPLGARTH, ARCHITECT

A NEW WATERPROOFING

Barlith is the trade name of a waterproofing compound, which has been recently developed and placed on the market by a California concern. This waterproofing has several unusual characteristics, which appeal to the California Architects and have caused many of them to specify it for their work.

Barlith is a white, milky liquid which does not alter the appearance of even the most delicately tinted building stones, such as the white Manti (Utah) limestone. It does not seal the pores, flake off with time, and is not affected by extremes of heat and cold.

The manufacturers state that as a result of their research they succeeded in getting an insoluble, elastic, water repellent material, resembling synthetic rubber, into a permanent

solution and that when the water carrying this composition evaporates the compound is deposited in infinitesimally thin layers on the inside surfaces of the pores so that materials are waterproofed and yet free circulation of air is not restricted.

Many difficulties were encountered, not only in evolving the compound, but also in perfecting processes of manufacture which difficulties, however, are of more interest to the chemist than to the architect.

Barlith has been successfully used for waterproofing cement and magnesite floors, cement stucco, Tufa, diatomaceous earth, magnesia and asbestos insulating material, etc., in fact, the manufacturers claim that it will waterproof anything which water penetrates. It

(Concluded on Page XIV)

Review of Trade Literature

CONCRETE HOUSES

An exceptional book on concrete construction. It has thirty-four pages bound in an attractive cover and contains many architects drawings, including floor plans of concrete houses of various designs. The book covers in detail such subjects as wall construction, concrete roofing, steps and porches, floors, basements, beauty and proportion of design, fireplaces, the Architects service and others. The Portland Cement Association, 111 West Washington Street, Chicago, Ill.

SANITARY DRINKING FAUCETS AND FOUNTAINS

A catalog containing forty illustrations showing various types of sanitary drinking fountains. Special attention is given to the problem of drinking arrangements in schools and other public places. Haws Sanitary Drinking Faucet Company, Inc., 1808 Harmon Street, Berkeley, California.

FIREPLACES AND MANTEL DESIGN

A catalog of mantel designs containing thirty-one full page drawings. A key plate in color shows the various types of tiling and the many color designs which may be created. This book will prove a valuable addition to the Architect's files, and will materially assist the home owner in the building of a fireplace which combines beauty and comfort. Batchelder-Wilson Company, Los Angeles, Calif.

INSULITE MASTIC FLOORING, ITS USE IN SCHOOLS

A circular for the information of those interested in a permanent flooring for schools and other large public buildings. Forty-eight schools are named where this type of flooring recently has been installed. Also a short outline of the quality and use of Insulite is given. Insulite Chemical Company, 373 Monadnock Building, San Francisco, Calif.

BALL BEARINGS FOR ELECTRICAL MACHINERY

A non-technical book containing many illustrations and thoroughly covering the various uses of ball bearings in electrical machinery. A few of the chapter headings show the wide range of this publication: Motor Generators; Vertical Motors and Other Ver-

tical Electrical Machines; Belt, Chain and Gear Driven Motors; Auto Motors and Generators; Car Lighting Generators; Industrial Motors and many others. S. K. F. Industries of California, 115 New Montgomery Street, San Francisco, California.

HOFFITE FLOORING AND STUCCO

A hand book of Flooring and Stucco showing the wide range of uses for the Hoffite Products. Its use in hospitals, churches, sanitariums, office buildings, factories, schools, bath rooms, etc., is covered in detail. Directions for application, care and upkeep are given. Hoff Magnesite Company, 333 Monadnock Building, San Francisco, Calif.

THE BOOK OF MODERN BATH ROOMS

A booklet of nearly 100 pages containing many illustrations of modern bath rooms and modern bath room appliances. The text covers the work of the architect, contractor, builder and plumber and is of interest to the home-owner who is interested in having the best there is in bath room fixtures and arrangement. Pacific Sanitary Manufacturing Company, 67 New Montgomery Street, San Francisco, California.

LEATHERSTEEL MATS AND RUNNERS

Twenty-eight page catalog, with many illustrations, showing various installations of Leathersteel Mats. The text gives in detail the material entering into the construction of this product, its durability, cleanliness, attractiveness, and its adoption into hotels, public buildings, street cars, automobiles, etc. The Pacific Leather Mat Company, 77 O'Farrell Street, San Francisco, California.

LOWER EXCAVATING COSTS

An illustrated folder on the Smith Excavator and Loader has just been published. It features the fact that contractors who are using these machines for many kinds of work—drag line excavating, cellar digging, excavating sand and gravel, stripping and miscellaneous earth handling—are saving considerable time and money. Illustrations show how contractors are able to keep their wagons out of the hole and how they eliminate the need for building and maintaining an incline. The new truck-type, four-cylinder motor of 4-inch bore and 5-inch stroke, now used, is also shown. T. L. Smith Co., Milwaukee.

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IN CURRAN THEATER

In all, the tendency of lighting fixtures for interior decorating seems to drift between the flood tide of color and ornament and the ebb-tide of simplicity. American manufacturers in co-operation with the architects show encouraging signs of true appreciation of the respective values of design, breaking away from the old tradition of the futility of education in special and general design.

They have encouraged good design and made great efforts to embody in their products of quality, which they see that the



designer intended. Moreover they are beginning to educate more generally, not only dealers and salesmen, but the great mass of public trade with which they come in contact.

In the new Curran Theater we see harmonious association of fine architectural details with very extraordinary lighting agents. The chandelier, pondrous, substantial and magnificent, is a successful rendering of a historical style, adapted to modern circumstances. It is an elaborate crystal chande-

lier of eminently successful design of new form and specially devised to meet the exigencies of "style" as well as to satisfy the practical requirements of the Theater.

While this handsome display of beautiful form, palatial Austrian clear crystal fruit and flowers and splendid metal worker's craft, painted a tawny green and gold that was so wonderfully used by the French of the Louis XIV period, this wonderful thing weighs approximately 4,200 pounds. It seems hardly feasible as one looks at what appears to "just float."

A tabulation compounded by the manufacturers and designers, Thomas Day Company, 727 Mission Street, San Francisco, California, is as follows:

800 feet of $\frac{1}{4} \times 1\frac{1}{2}$ -inch flat iron; 14 feet XXX hydraulic pipe; main casting weighs 250 pounds; 5 brass hickeys, 10 pounds each; 10 large spinnings; 425 cast brass leaves of one character and 100 large brass acanthus leaves of another character; 425 $1\frac{1}{4}$ -inch knobs; 16 wrought iron consol arms; 224 candles; 27 other auxiliary lights; 40 large husks of cast brass leaves; 8 large cast brass sheeps heads; 4 large cast brass fawns heads; 1 large wrought iron basket; 8 circuits; 1200 feet of No. 14 wire, total wattage, 9,910-W; all lamps specially toned in antique rose; 1300 pounds of Austrian prisms.

The originators of the Emperor Style, the most recent of historical periods, could not by any chance dream of, or imagine the wonderful resources of our day. While great architects and designers racked their brains to think out new ways of attaching innumerable candles to their chandeliers and candelabra to the end that the Emperor's festivities might be more brilliantly lighted, they never even suspected that without the slightest trouble, the American people would multiply their candle power ten thousand fold. Considering the resources of the world, it seems evident that a great art is in the making, and that its center will be somewhere among the lighting fixture manufacturers of America.



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ARTHUR KELLY, Architect

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everything is ready for actual construction which will be started immediately. The cost of the building is to approximate \$600,000 and the main auditorium will have a capacity of 6000 people. Smaller assembly rooms are incorporated in the plan and the building, when completed, will afford Stockton one of the finest auditoriums in California.

The city is also to start construction on the new city hall, costing in the vicinity of \$600,000, before the end of the present year. A site for this building has likewise been selected and is now being cleared of the present structures.

To keep pace with the growth of Stockton, work is now progressing on seven school buildings. At the high school an auditorium with a seating capacity of 2500 is under construction.

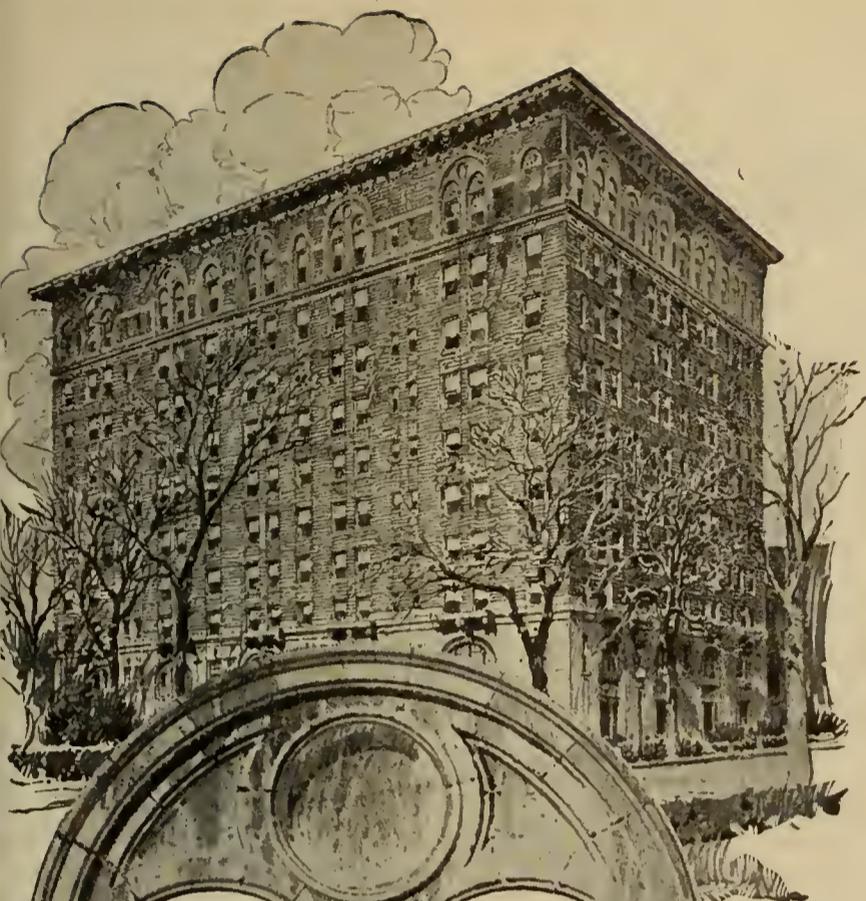
Actual construction on the new College of the Pacific buildings will probably be started before the end of the year. A campaign for financing these structures, which are expected to cost \$750,000 was recently successfully concluded, and the college plans to remove to Stockton in the fall of 1923.

(Concluded from Page 38)

\$13,136,685, as compared with \$9,669,245 for the same period of last year. Construction of several large downtown office structures and apartment buildings, as well as residences, is under way. Among these is preliminary work for the \$3,000,000 14-story office building, to be erected by the Dexter-Horton Estate, which will be the largest bank and office building in the Pacific Northwest. Plans are also being made for the erection of Seattle's new \$3,000,000 hotels, which was financed by popular subscription in a single week, and additions to some industrial plants are being made.

Bank clearings during the first eight months of 1922, totaled \$1,074,834,836.42, as compared with \$977,731,256.55 during the same period of 1921, showing a gain over last year of \$97,103,579.87.

Much public improvement work, including government irrigation project in the Yakima District, considerable state highway construction and a substantial amount of municipal building projects are under way.



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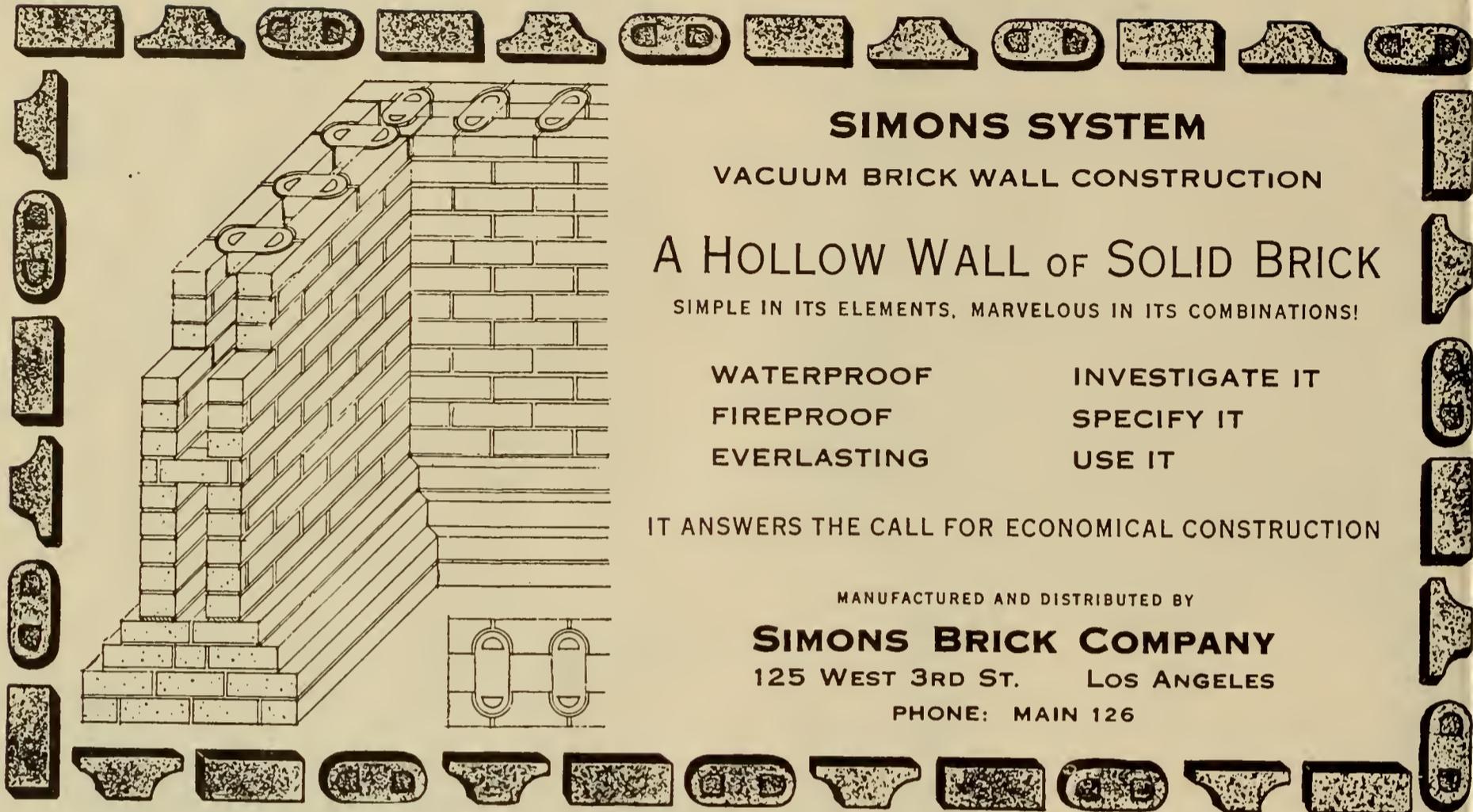
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FIRE PREVENTION WEEK

Manufacturers of fire-resistive materials and of fire-fighting and retarding apparatus, for the first time, will have the opportunity of taking part in a Fire Prevention Exposition to be held October 2 to 7 at the Twenty-second Regiment Armory, New York City, where will be shown, by exhibit and demonstration, what a vital part in the fight against the great annual fire loss is played by fire-safe materials and apparatus.

The Exposition originated with the Fire Prevention Committee of the National Association of Insurance Agents as part of its program of fire prevention activities. It has been endorsed by the National Fire Protection Association, the National Association of Credit Men, by President Frank G. Reynolds, of the International Association of Fire Engineers, the National Board of Fire Underwriters and other associations.

The problem of reducing the terrific strain on business caused by preventable fires, that seem to be increasing each year, is one that has long engaged the attention of these

(Concluded on Page XVIII)

(Concluded from Page 39)

is also recommended as a sizing material for concrete or plastered walls to prevent saponification of oil in paint, which may be subsequently applied, and it is stated that brick or concrete treated with Barlith will be free from efflorescence or "alkali-bloom."

One of the recent applications of Barlith in San Francisco is to the beautiful residence of Mrs. A. B. Spreckels on Washington and Octavia streets, where the architect, Mr. G. A. Applegarth, selected it after a series of tests, conducted under his instruction, by R. E. Noble & Company, Testing Engineers, of San Francisco.

In Los Angeles it will be used on the new and magnificent Biltmore Hotel, which is claimed to be the finest building of its kind on the Pacific Coast as well as on a large proportion of all the better class of new buildings.

In addition to its application to the building trades Barlith is being used to waterproof certain fabrics such as canvas for tents and awnings, khaki, outing clothes, etc.

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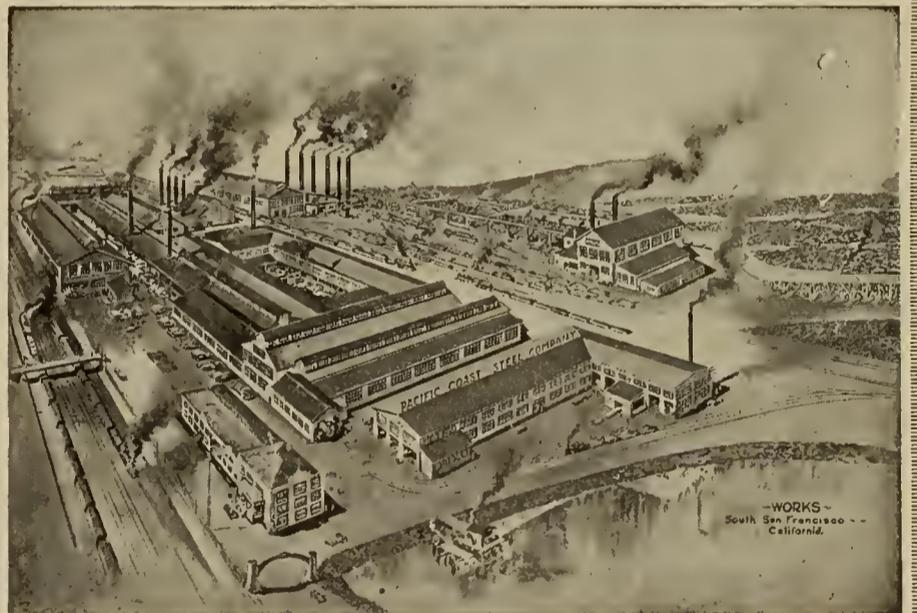
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(Concluded from Page 37)

the point which the owner deems necessary to make the building bring commercial returns on the money invested. As we grow richer and our people develop more local pride, it is to be hoped we will get a larger percentage of buildings that have more of elegance and richness and are more monumental in character.

This thought brings us squarely up against the crying shame of our city, namely the absolute lack of public buildings, about which we might indulge in the great American pastime of "pointing with pride", and let us hope that the next few years will change this mortifying condition.

Speaking of public buildings, the one bright and shining exception to the above is our public school buildings which, while not as expensive as many of the Eastern schools, are well designed, well built and in many cases really architecturally beautiful.

Strangers sometimes comment on our lack of "skyscrapers" which one must admit do give a city a metropolitan aspect, but I hope our officials will never fail to realize that there are vital reasons why we should maintain our present one hundred and fifty foot height limit. Aside from the manifest unfairness of one owner depending on his neighbor's low building to give him the light and air demanded for a skyscraper, the proportion of built-up area to street area in our city is much larger than in the average city, due to our unusual length of city blocks. In other words, we have not enough street area to take care of our present congestion, much less to care for the congestion that would result from the greater number of people occupying any considerable number of skyscrapers.

Another phase of our present growth that is becoming very noticeable is the outlying small commercial building, and in our present manner of handling this work I feel we are making a great mistake in following in the rut of the past in assuming that the only form a commercial building can take is the flat roof, boxlike structure, instead of using a somewhat diversified window treatment and broken up sloping roof which would blend into the adjacent residential growth, without destroying residential values as does the present local custom. In this we are distinctly behind the times. Two notable instances of proper handling of outlying com-

mercial buildings are Kansas City, where local business centers, of a residential type of architecture have been built in connection with their Park boulevard development, and in Lake Forrest, Illinois, where the fronts of blocks of the old type of store building were torn down and replaced with a more picturesque treatment, much to the financial advancement of store keepers and property owners. This suggestion is one that, in my mind, if carried out, would do much to beautify our city. If one needs an illustration of the truth of this statement, drive out practically any one of our main boulevards leading to beach or inland town and note the blots on the landscape in the form of detached brick store buildings.

SMALL HOUSE SERVICE BUREAU ORGANIZED

At a special meeting held July 29, 1922, the Oregon Chapter, A. I. A., approved the recommendation of its Committee on the Architects' Small House Service Bureau that subscribers proceed to the incorporation of the North Pacific Division.

The Committee, all of whom are subscribers to stock, have therefore set Saturday, September 2nd, at 10:30 a. m. in the Green Room of the Commercial Club, Portland, Oregon, as the time and place of meeting for organization and incorporation.

At a preliminary meeting of all subscribers to be held August 23, at the same time and place, proper application and preliminary papers will be drawn up.

This will make the fifth regional division to be definitely organized. In addition to the well established Northwestern and Mountain Divisions, the North Central with headquarters at Milwaukee and the North Atlantic with headquarters at New York City have been definitely organized.

(Concluded from Page 37)

- Keith, C. H.—618 Realty Bldg., Spokane.
 Knox, Alexander N.—710 Hoge Bldg., Seattle.
 McClelland, Robt. F.—U. of Wash. Dept. of Architecture, Seattle.
 McGuire, John E.—432 Broadway, Tacoma.
 Mallis, William—409 Lyon Bldg., Seattle.
 Mason, Roy S.—622 Provident Bldg., Tacoma.
 Mock, Ernest T.—Perkins Bldg., Tacoma.
 Morrison, Earl W.—Symons Bldg., Spokane.
 Pehrson, G. Albin—816 Riverside Ave., Spokane.
 Peters, Frederick J.—509 Pantages Bldg., Seattle.
 Shaw, Frederick—414 Tacoma Bldg., Tacoma.
 Stanley, J. C.—512 Denny Bldg., Seattle.
 Stimson, V. Salisbury—Symons Bldg., Spokane.
 Stoddard, George W.—303 Lyon Bldg., Seattle.
 Thompson, Noel E.—1126 Poulson Bldg., Spokane.
 Wohleb, Joseph H.—Cap. Nat. Bk. Bldg., Olympia.
 Zeigler, E. E.—1427 22nd Ave., Seattle.

CHAPTER MEMBERS

- Champney, E. F.—1025 Henry Bldg., Seattle.
 Dean, Marshall—101 Hoffman Ave., Monterey, Calif.
 Heath, Frederick—Puget Sound Bank Bldg., Tacoma.
 Lawton, George—1501 Alaska Bldg., Seattle.

San Francisco Chapter A. I. A., no meeting in August.

NEW WATER HEATER MANUFACTURED IN SAN FRANCISCO

A new hot water heater, manufactured in San Francisco, has just been placed on the market. It contains many points which are a radical change from the standard heaters.

The water is fed into a one gallon tank, which is heated by a pilot light. From this tank the water is led in a pre-heated condition through a pipe connecting with the copper coil, directly above the gas flame.

The water runs upward through the copper coil, returning downward through a return coil, passing again directly over the flame, and off to the faucets.

The inventor, Thomas Muchleisem, claims for this heater a capacity of over two gallons of hot water per minute.

There is no loss through condensation. The up and down circulation feature with the outlet at the bottom of the coil keeps the pipes at all times free of sediment. It also prevents the burning out of the pipes.

This heater, known as the Wizard Water Heater, and is manufactured by the Oscar Krenz Copper and Brass Works, 626 Bryant Street, San Francisco. Mr. L. M. Donihue, of the Wizard Sales Company, 833 Market Street, will handle the distribution.

LOCAL DECORATORS AWARDED CONTRACTS FOR MANY NEW BUILDINGS

The following painting contracts have been awarded to A. Quandt & Sons, of San Francisco and Los Angeles:

Twelve story office building now under construction at Eighth and Spring Streets, Los Angeles; Loy L. Smith, architect; Clinton Construction Co., general contractors.

Contracts on eight high and grammar schools at Los Angeles, San Pedro and Santa Monica have been recently awarded.

Eight story Walton N. Moore Dry Goods Company building, San Francisco; George W. Kelham, architect; Mission and Fremont Streets; Foundation Co., general contractors.

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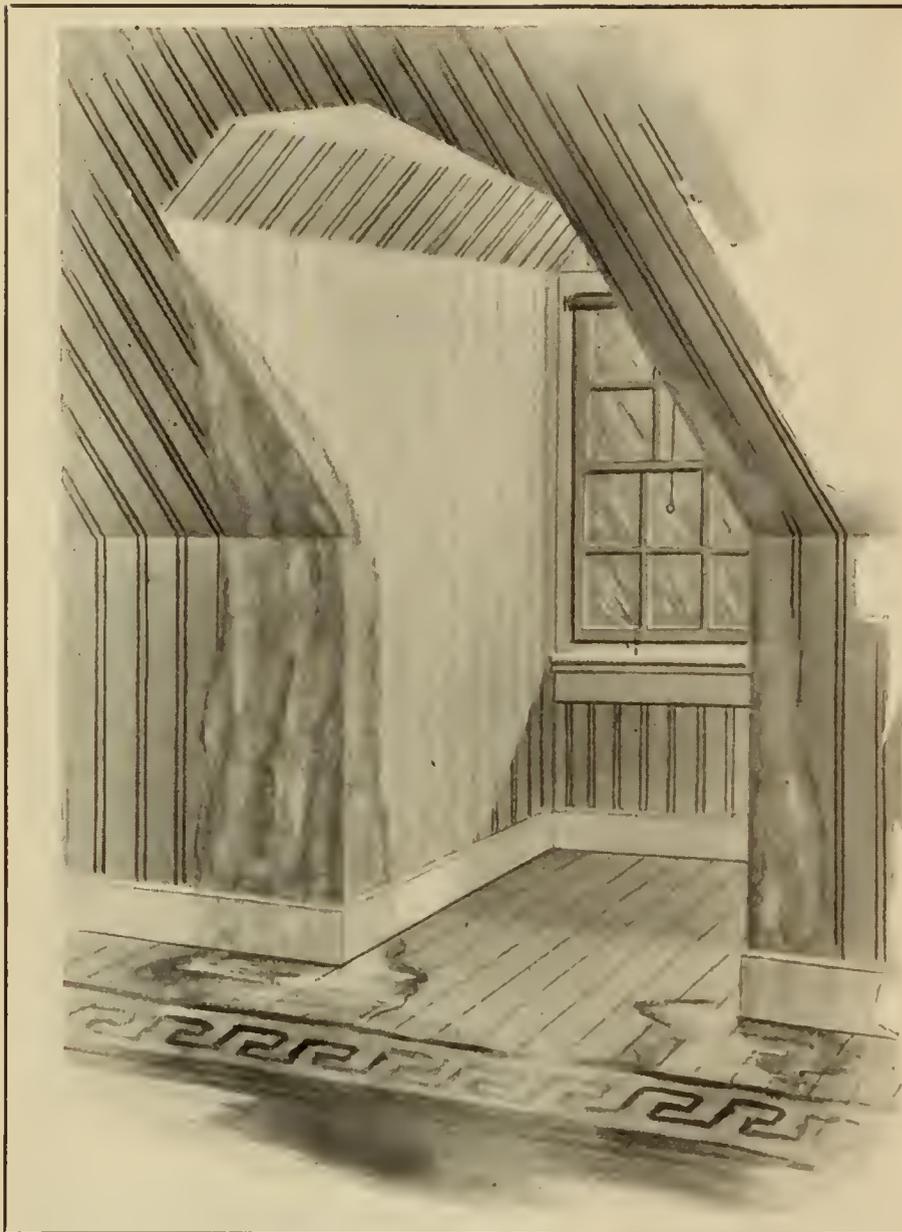
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(Concluded from Page XIV)

organizations. At the present rate of burning, property worth \$1,300,000 is being destroyed each day. This is a financial burden which is borne by business men, for the fire insurance companies, contrary to general belief, do not bear this loss—they simply pay out \$1,300,000 each day that has been paid in to them in premiums by the public.

(Concluded from Page 38)

year to date total approximately \$7,000,000, and Building Inspector Ben Covell expects at least \$5,000,000 to be added to that figure before the close of the year. There is a probability that the total may reach \$15,000,000, Covell says.

The increased building activity has taken in all lines—industrial plants, schools, state buildings, business buildings, apartments and residences.

The biggest single construction work was the starting of the state buildings across the streets from the capitol. Six more school buildings were completed, giving Sacramento

a collection of school structures that, for attractiveness and convenience, would be a credit to any city. The principal industrial plant was a canning establishment which, upon completion, will be one of the largest on the Pacific Coast.

Office and business buildings started or erected this year, include the home office of the California State Life Insurance Company, a twelve story building; a large addition to the John Breuner Company's store; a big distributing branch by the W. I. Elliott Automobile Company, and office buildings adjoining Capitol Park.

Erection of a \$250,000 hospital across the street from historic Sutter Fort was started in September and another hospital of the same size will be under way before the close of the year.

The rapid growth of the city is plainly evident from the unprecedented number of dwellings and apartments erected in Sacramento this year, the average being 100 a month. On this basis, the increase in population for the city in 1922 is computed at approximately 5,500, bringing the total to 81,000 residents.

Southern California Architects==Walker & Eisen

THE
BUILDING
REVIEW

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OCTOBER, 1922

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Published in San Francisco

THE BUILDING REVIEW

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Editor—Harris Allen

Industrial Editor—Howard Hoyt

Business Mgr.—H. R. Braden

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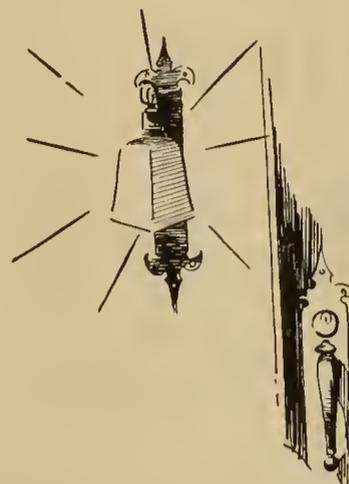
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The editors will be pleased to consider contributions of interest to the Industry. When payment of same is desired, this fact should be stated.

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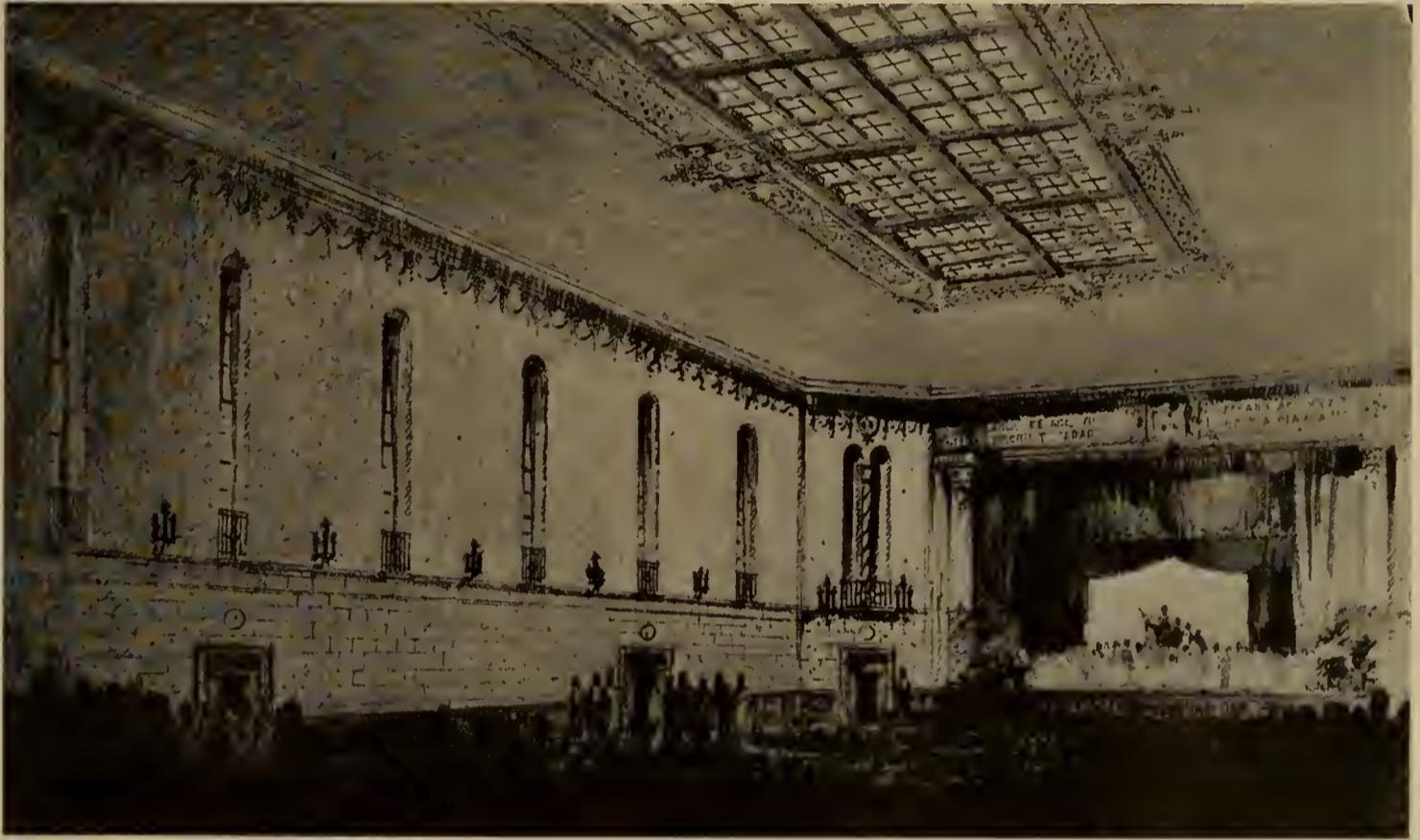


The BUILDING REVIEW

VOL. XXII

SAN FRANCISCO, OCTOBER, 1922

No. 4



INTERIOR WOMAN'S CLUB AUDITORIUM

WALKER & EISEN, ARCHITECTS

HOLLYWOOD, CALIFORNIA

Southern California Architects

Walker and Eisen, Business and Residence Architects

BY HARRIS ALLEN

Apparently it is next to impossible for Los Angeles architects to avoid doing residences. The people keep coming, and they simply have to be housed. Of course, when you come down to it, that is really the ultimate object of all the banks and stores and offices—to produce the money to build the homes, and keep them going.

So when one hears of a firm like Walker and Eisen as turning out a number of excel-

lent business buildings, he need not be surprised to find this well lined architectural nest containing also a number of what are, apparently, residence cuckoos.

There can be traced a family resemblance between all the fledglings, however; one must not jump at conclusions. One of the parent birds may have done a good deal of traveling. Be that as it may, through the divergence of type run certain salient characteristics more



VEASEY STORE BUILDING

WALKER & EISEN, ARCHITECTS

LOS ANGELES, CALIFORNIA

or less recognizable; a careful observer will need no Abrams blood test to determine consanguinity here.

The first general trait one notices is a weakness for strength, if I may put it in Irish fashion. All these designs are marked by a solidity, an emphasis of mass, which carries the conviction of good construction. Occasionally this is over-emphasized. It does not go so far that it can be called brutal or gauche, but it is somewhat harsh, perhaps. A far better quality than thinness, meagreness or fussiness.

There goes with this sturdiness, quite naturally, a structural feeling which shows

itself, if not always in symmetry, certainly in consistency and in logical arrangement of openings and other elements of design.

Another trait in common is a noticeable tendency to horizontal lines. In fact, this might be extended to show a fondness for straight lines generally; for there is a sparing use of the curve and a daring use of the straight.

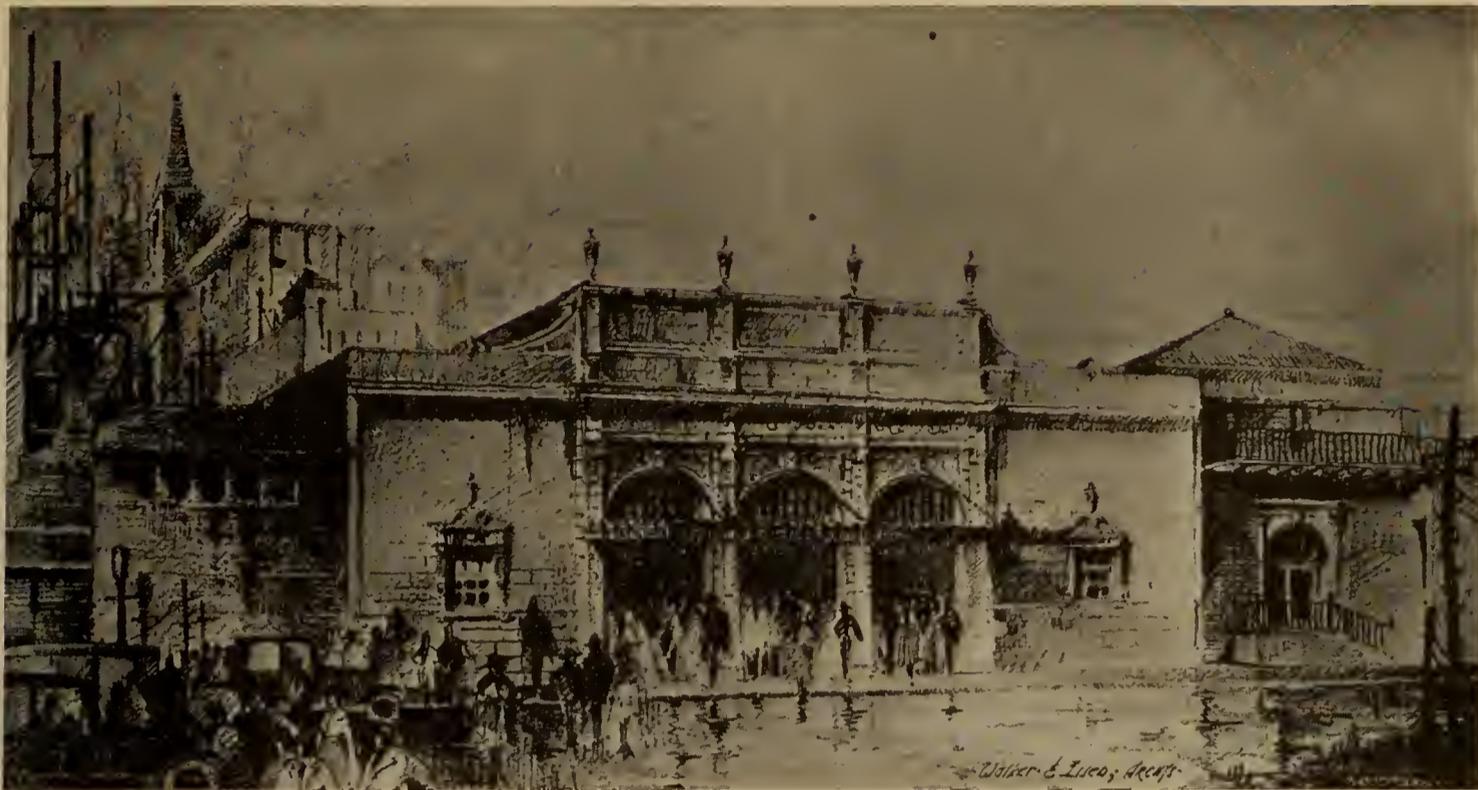
And in both domestic and commercial compositions, one finds predominating Spanish influence, not of the flamboyant type, but rather of the class so common in Spain, which combines extreme simplicity, vigor and good proportion, and achieves distinction.

The house for Mr. N. S. Stephens has an interesting entrance, more picturesquely treated than most of the houses, and a patio with a decided Mexican character. Mr. Scott's residence is more formal and dignified. The lines of belt course and cornice are accentuated by the solid, dark shutters; Walker and Eisen use shutters as essential parts in many of their designs. The end elevation of this house is a nice bit of composition, well proportioned.

The house for Mr. R. H. Douglas might be one of our early small Missions, given some weather stains and a more overhanging roof. It has the same charm of direct simplicity. Mr. Douglas, by the way, is responsible for many of the well rendered drawings of this



RESIDENCE OF MR. R. H. DOUGLAS
ALPINE DRIVE, BEVERLY HILLS, CALIFORNIA
WALKER & EISEN, ARCHITECTS



THEATRE AT ALHAMBRA, CALIFORNIA

WALKER & EISEN, ARCHITECTS

firm—drawings with a remarkable freedom and sureness of touch. The chiaroscuro in the sketch of the Sawtelle Gas Company building is worth special comment.

There is much of interest in each one of the other houses shown; those for Messrs. John and Thomas Cooper are particularly promising. There is good "body" to those designs; bones, blood and meat. You will find no finicky, la-de-da detail, no lady-like architecture here. This is he-man stuff. A few minor things might stand more study. I don't like the high stilted arches over the Warren house door, for instance; and the tower in Mr. Eisen's own house might well be broadened to tie the two wings more together. The Oakman facade is a somewhat over-used motif, but they have given to the courtyard an original and interesting touch, nor does it appear forced.

The business buildings shown are but a small sample of the firm's output in this line. They are without exception vigorous, sane, well designed and well fitted to their purposes. The banks are naturally the most conventional. The San Gabriel Postoffice is a remarkably effective piece of repressed realism. There is nothing stereotyped and yet nothing stagy about it (for all that it would make a successful piece of stage scenery) and it appears solid enough for its official responsibilities.

The Gas Company buildings are both good pieces of design, even if the Santa Monica office does look like a Carnegie Library. After all, they are both for illuminating purposes. The Sawtelle office is a sheer idea, frozen into form. It is flawless of its type.

The two stores shown are so far ahead of the average store of that size that they will shine out like a good deed in this naughty world. Besides filling the practical requirements of light, space and so on, their attractive and well-studied design will have its due advertising value. Why do not more business men realize this when they build stores?

AMERICAN MORTGAGE CORPORATION
LOS ANGELES, CALIFORNIA
WALKER & EISEN, ARCHITECTS

THE GARDEN

CHARACTER STUDY IN TREES

BY WILLA CLAIR CLOYS

Given Before the Garden Club of Alameda County

Each problem presented to the Landscape Architect must be solved from the standpoint of a landscape painter, however, disguised and involved it may be in the vestments of business and utility. The area to be developed is the foreground; the middle distance and background embraces all that the eye beholds, from horizon to horizon. Just how much or how little detail shall be admitted into this background and middle distance and what the character and outline of the horizon line shall be is just as deep a question of design as is the development of the foreground.

You may have read in books on landscape gardening that, whereas the painter presents his vision by means of tractable pigments, the landscape architect works with the ever-changing, erratic, capricious material of growing plants. The result, at first impulse, would seem a gamble; but if one gets behind the limitations of the material at hand, and faces the problem, as he must, from the standpoint of pure design, one sees that in reality both painter and gardener are dealing with the relative value of masses,—dark masses against lighter areas,—and nothing else. The size, shape and location of the masses, whether they be shrubbery, trees, sweeps of lawn, architectural features, or dashes of singing color must be studied from this standpoint, and their individuality merged into their massing value. It is right at this point that the landscape architect ceases to be an horticulturist and becomes an artist.

So much for theory. When it comes to practice it resolves itself into this: How well do you know your plant? Take trees for instance, since they so largely compose our backgrounds and determine our horizon lines; you all are familiar enough with the Oak and the Lombardy Poplar to see that they would have very different mass values; but aside from the form or outline, are you familiar enough with even these species to state wherein their differences in value lie?

The question of form is the most evident source of variation, and granting that no two individual trees are alike, they may be roughly classified as either round-headed, pyramidal or oblong, spiry-topped, or drooping. This

systematic variation in outline is influenced primarily by the angle direction of the branches. There are several Deodar Cedars on the grounds here, excellent examples of spiry-topped trees, and you will note how inevitably the form is determined by the straight leading trunk and the horizontal whorls of tapering branches.

In the pyramidal Lombardy Poplar the branches are abruptly ascending; and in the round-headed trees, by far the most prevalent form, the branching system takes off at about 45 degrees and is intricately spreading. This latter point illustrates a secondary influence in determining form, that of the number and size of the subdivisions in the branching system.

Taking "form" to mean the size, contour and character of the surface of a tree as determined by the number and disposition of its branches, we have a key to first knowledge of the massing value of our material. But at once there is felt, even as to trees of the same form, a more subtle difference of effect similar to the differences of expression on human faces. The round-headed Oak, with its numerous breaks in the surface of its foliage, catching the light or providing deep shadows, presents a softer, more interesting, texture of its mass than the very regular, round, solid-looking Horse Chestnut or the bristling Pine.

This matter of texture in trees and shrubbery, depending as it does on the character of the masses of foliage as determined by the manner of growth, the profusion, shape, tissue, and disposition of its leaves, calls for an intimate knowledge of each species. Texture is of as much importance in considering the appropriateness and harmony of a mass planting as is the choice of material for a costume.

Leaves may be large, or small, smooth or rough, leathery or thin, simple in outline or toothed or lobed; they may be stiff or pliant in tissue, shiny of surface or dull or velvety; they may be numerous or comparatively few, clustered or scattered, held erect or horizontally, rigidly or in a drooping manner. A variation in any one of these characteristics greatly alters the general aspect of the foliage en masse. A tree is sturdy-looking or graceful



ESTATE OF CHARLES W. CLARK

CYPRESS TREES

PEBBLE BEACH, CALIFORNIA

chiefly by reason of its form; but such varieties of sturdiness as may be expressed by the words severity, sombreness, majesty, and such varieties of grace as may be expressed by fragility, delicacy, lightness, — arise very largely from the texture of the foliage.

Color is more or less affected by texture. Green will seem darker if the head of the tree is massive and dense rather than feathery and light. Greens may vary to blueish, grayish or yellowish, but the tone or value is intimately connected with texture. Shiny-surfaced leaves give tone quite unlike that produced by dull or wooly texture. Trees whose leaves are quivering with every passing breeze are more vivid in tone than are those whose leaves are rigid and stiff. Many trees like the Silver Maple and the Silver Poplar have a contrasting color on the under side of the leaves. This should by no means be ignored in considering these trees for massing, for the general effect in restless and disturbing.

Trees differing in color, form or texture to such an extreme as to be peculiar or eccentric such as fastigiate, weeping, purple-leaved or variegated, should be used only as specimen plants, accents or contrasts, and used sparingly. Trees with comparatively small leaves, regularly and thickly distributed over the branches have a uniform texture and give a

quiet restful effect. These may be used in larger masses and are good for blending varying groups.

Spiry-topped trees such as Redwoods, Cedars, Spruce, Fir, Larch and many Pines, have the needle-like foliage arranged in parallel or drooping tufts. Being mostly conifers and evergreen, their color tone is generally darker than that of deciduous and broad leaved evergreens. The whole effect is so sombre, wild, aggressive and picturesque that they are seldom happily used in masses except in the ruggedest mountain country. They have their value in grouping, however, in giving snap and spirit by contrast with the generally undulating, billowy contours of the round-headed trees. A too profuse scattering among round-headed groups defeats this purpose of contrast and presents confusion instead.

Weeping Willows, Birches, Mulberry, Elms and other pendant trees defeat reason for being when grouped either with themselves or with other trees. Their interest lies not in the shape of the top but in the lines of the small branches. In grouping, this would be concealed by their neighbors. If they must be used, remember that they are elegant rather than noble, ornate rather than inspiring, highly civilized rather than sublime. They

(Continued on page 51)

EDITORIAL

The architectural profession is becoming daily more convinced of the necessity for publicity work. "Public information" is the preferred name, and that under which national and local committees have now been appointed. The general unfamiliarity of the public with the reasons for distinction between good and bad architecture, and with the real functions of architects, has until recently been accepted as a necessary evil; something to accept with resignation, like "earthquakes, strikes, and other acts of God", as our old building contracts quaintly put it.

Perhaps the principal sign of a new spirit in the profession is its changing attitude in this respect. The American Institute of Architects is indefinitely committed to a policy of educational publicity, and its national officers are actively working to secure the systematic publication of articles, throughout the country, which explain in various ways the need for architecture and architects and the real meaning of these terms.

As to individual publicity, the Institute has moved more slowly. It is not easy to preserve the difference between a profession and business by drawing a sharp dividing line. The convention is still unshaken, and for public good should always exist, that architecture must never become a purely money-making proposition. Not only the art element of the industry, but also the sense of obligation for public welfare should suffer. What the Institute has done, has been to remove some of the restrictions as to what might be called "advertising" and leave it up to the good sense and judgment of the individual architect to determine how he shall acquaint the public with his ability and his experience.

This has been done, without losing dignity, in several ways; by building sign boards, by professional "cards" in publications, by architectural exhibitions conducted in a proper manner, and by illustrated articles in the architectural press. And strong efforts are being made to prevent descriptions of any buildings being published without credit given to the architect. This is due to him fully as much as to the author of a book or the painter of a picture.

The Building Review has aimed at a constructive policy in its architectural critiques. This policy is sometimes misunder-

stood by readers—especially architects—who believe that faults should be condemned as well as virtues praised.

In matters of policy, The Building Review hopes that it will always have the courage of its convictions. It will express its disapproval of public or private policies that seem dangerous or obnoxious. As to criticisms of buildings, our mind goes along with Professor William Lyon Phelps, from whose article in the October Scribner's, we quote:

"Because I am enthusiastic about good things, and make no attempt to conceal it, I am frequently accused, much to my amusement, of saluting every new book with indiscriminate praise. There could hardly be a more inaccurate indictment. The majority of recent novels, some of which are seriously recommended by respectable reviewers, are in my own mind fairly divisible into two classes—sawdust and poison. It is bad enough to have to inhale these during the brief time they afflict us; why call public attention to them? I have no wish to advertise rubbish by attacking it.

"By this restraint I know that I deprive many readers of real pleasure. For unless you are a family relation of the victim, you heartily enjoy the resounding thwack of the bludgeon—the slapstick in reviews is as popular as the same implement in the motion pictures. It is down-right funny to see somebody else hit, and the harder the blow the funnier it is. But I am not sure that by catering to this instinct, one performs any valuable service to the art of criticism, or helps to elevate public taste.

"And I dislike controversy because it usually leads nowhither."

ACCIDENT TO T. PATTERSON ROSS

The architectural profession and the building industry in general are distressed over the unfortunate accident which happened to Mr. Ross. He was hit by a load of brick, falling down the elevator shaft in the new building for the Union League Club, San Francisco, of which he is architect. Mr. Ross is at a local hospital and his condition is very serious. His ability as an architect and his genial personal qualities have given Mr. Ross a wide circle of friends who will regret his misfortune.

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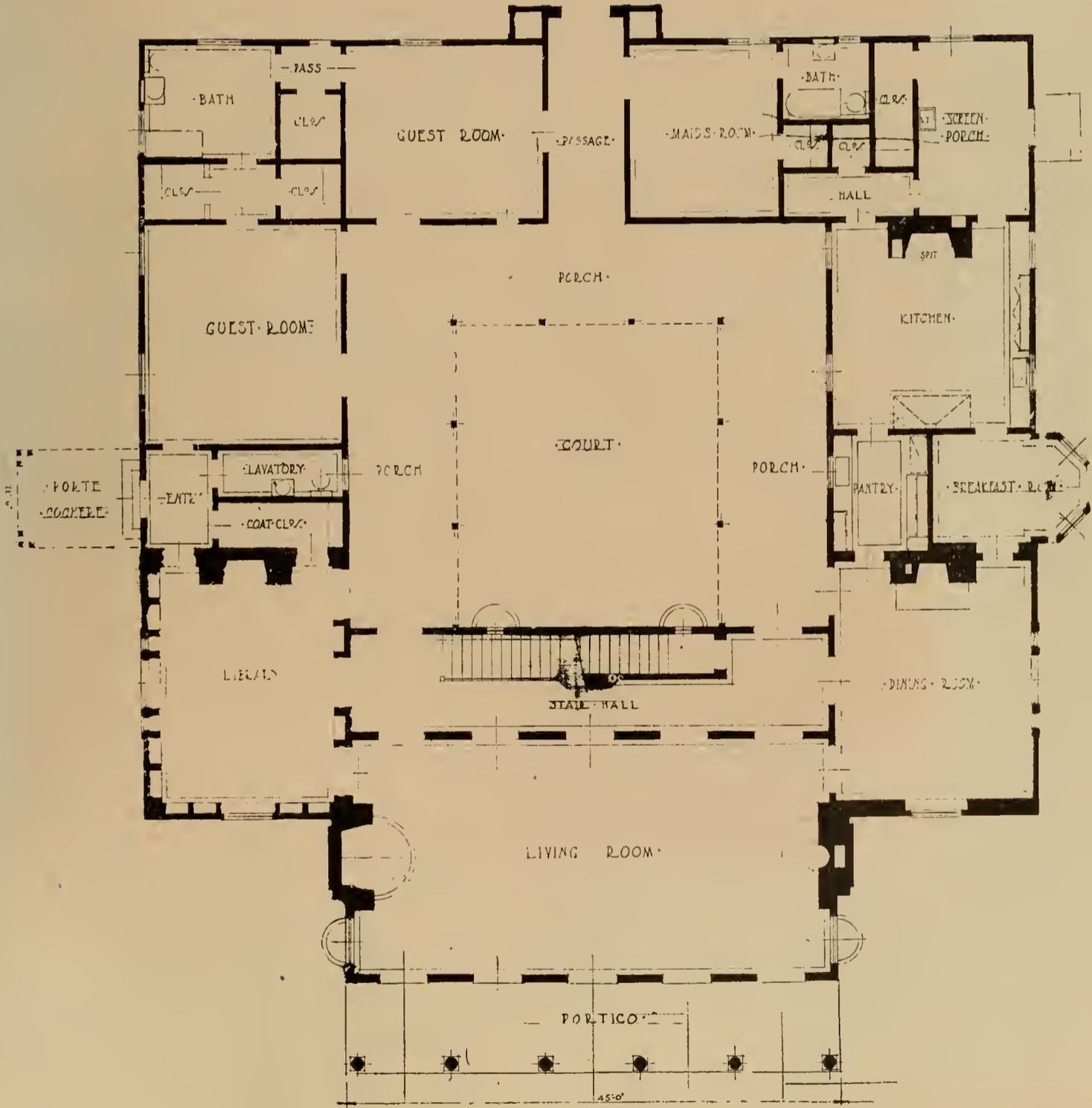
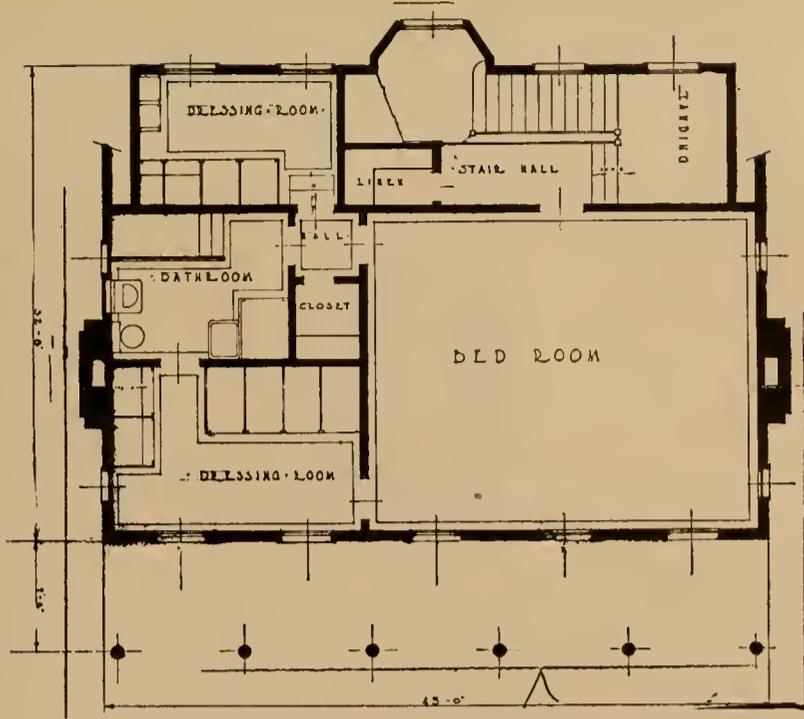


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THE BUILDING REVIEW



SAN FRANCISCO CHAPTER AMERICAN INSTITUTE OF ARCHITECTS
MONTHLY BULLETIN

OFFICERS

Geo. W. Kelham, President.
Henry H. Myers, Vice-President.
J. S. Fairweather, Secretary-Treasurer.



DIRECTORS

Wm. Mooser, three years.
J. H. Blohme, three years.
A. J. Evers, two years.
Harris Allen, two years.
S. Schnaittacher, one year.
Morris M. Bruce, one year.

NEXT MEETING

The next meeting will be held on Thursday evening, November 16th, at the Architectural Clubrooms, 77 O'Farrell street, at 6:30 p. m.

Matters to come up will be the establishment of an Educational Fund and the granting of broader authority to the Board of Directors, in accordance with Institute policy.

Dinner as usual.

OCTOBER MEETING

The meeting for October was the annually meeting and following is the minutes of the meeting, and the president's and secretary's yearly reports:

MINUTES

The annual meeting of the San Francisco Chapter of the A. I. A. was held on Thursday evening, October 19th, 1922, in the Architectural Clubrooms, 77 O'Farrell street. The meeting was called to order by President Geo. A. Applegarth.

The following members were present: Geo. A. Applegarth, W. B. Faville, John Baur, John Bakewell, B. S. Hayne, John Norberg, S. Schnaittacher, Geo. B. Kelham, Harris Allen, Wm. Newman, L. M. Upton, E. H. Hilderbrand, W. H. Crim, J. S. Fairweather.

MINUTES

The minutes of meeting held on September 21st, were read and approved.

REPORT OF OFFICERS

The president read his annual report, which was ordered received and placed on file.

The secretary read the annual report of the board of directors and of the secretary-treasurer, both of which was ordered received and placed on file.

STANDING COMMITTEES

The reports from standing committees were from Mr. Henry H. Myers, chairman of committee on legislation building laws, engineers council, contractors and zoning submitted a written report which was ordered received and placed on file. Mr. S. Schnaittacher, chairman of committee on competitions, submitted a report which was read and placed on file; also a report on "Practice" was submitted by Mr. Schnaittacher, which was read and ordered placed on file. Mr. E. Coxhead, chairman of committee on education, submitted a report which was ordered received and placed on file.

ELECTION OF OFFICERS

The next in order of business being the election of officers for the ensuing year, the secretary was directed to cast the ballot for the regular nominees, whereupon the chair announced that the following had been elected to serve the Chapter for the ensuing year: President, Geo. W. Kelham; vice-president, Henry H. Myers; sec-

retary-treasurer, J. S. Fairweather; directors, three years, Wm. Mooser and J. H. Blohme.

NEW BUSINESS

Mr. Kelham took the chair and gave a short talk as to his policy for the ensuing year.

It was moved and seconded that the secretary write a note to T. Patterson Ross regretting his serious accident while performing his duties.

Mr. Wm. Newman gave a short talk on conditions as he found them in Europe.

ADJOURNMENT

There being no further business before the Chapter the meeting adjourned.

J. S. FAIRWEATHER,
Secretary.

PRESIDENT'S REPORT

During the past year the architectural profession has seen building conditions rapidly improving from the depression caused by strikes and lockouts to comparatively great activity. This great improvement in the building conditions is undoubtedly due large to the American Plan, together with other natural economic causes.

During this period the Chapter has had normal development in membership and has been honored by having one of its members, Mr. Faville, chosen as president of the American Institute of Architects.

For the coming year continued support is urged for the American Plan, which has so helped to stabilize conditions here and is restoring the confidence of eastern investors in our city.

Some work has been done towards organizing the Small House Service Bureau for this state and its accomplishment could result in a great benefit to the public.

Respectfully submitted,

GEO. A. APPLGARTH.

SECRETARY'S ANNUAL REPORT

October 19, 1922.

To the members of the San Francisco Chapter, American Institute of Architects.

Gentlemen:

Your secretary and treasurer begs leave to report as follows for the fiscal year, ending September 30th, 1922.

MEMBERSHIP

The Chapter has on its membership roll seventy-four Institute members, three honorary members, and fifty-two Chapter members, making a total of one hundred twenty-nine members.

Three members were lost through death, Mr. A. J. Bryan of Chico, Mr. James F. Dunn, this city, and Mr. Clinton Ripley of Honolulu.

Five were elected to Institute membership, Mr. Russell Ray, Santa Barbara; Mr. Albert J. Evers and Mr. Geo. H. Howard, this city; J. W. Plachek, Berkeley, and Chas. E. Perry, of Vallejo.

Three members were taken into the Chapter during the year, Mr. John E. Norberg, Mrs. B. S. Hayne and Mr. W. R. Yelland.

Messrs. Henry C. Smith, A. Coffey and Carl Werner were dropped for non-payment of dues.

Twelve members are delinquent in the payment of dues, amounting to \$396.00. Nine members owe for the current year, amounting to \$100.00, making the total amount due the Chapter to date, \$496.00.

MEETINGS

Eight meetings were held during the year with an average attendance of twenty members.

At the regular Chapter meeting September 21st, a dinner was given in honor of Mr. W. B. Faville, the newly elected president of the American Institute of Architects. About fifty members and guests were present and a very pleasant evening enjoyed by all.

The financial statement of the Chapter is herewith appended.

DISBURSEMENTS

Stenography and Bookkeeping.....	\$ 300.00
Rent of Rooms, Architectural Club.....	300.00
Stamps, Telegrams, etc.....	42.84
Office Supplies	39.45
Chapter Dinners	31.66
San Francisco Engineering Council.....	51.00
Multigraphing	125.99
American Institute of Architects, 55th Conv.....	223.34
Building Review	109.00
San Francisco Journal.....	50.00
Cash on Hand.....	237.75
	\$1,511.03

RECEIPTS

Balance on Hand, October 1st, 1922.....	\$ 161.03
Dues, October 1st, 1921 to September 30th, 1922.....	1,350.00
	\$1,511.03

SAN FRANCISCO CHAPTER, AMERICAN INSTITUTE OF ARCHITECTS

The regular meeting of the San Francisco Chapter, American Institute of Architects, was held in the Architectural Club Rooms, 77 O'Farrell street, Thursday evening, September 21, 1922. The meeting was called to order by the vice president, E. A. Coxhead. The following members were present: A. J. Evers, W. J. Wilkinson, E. L. Norberg, Jas. W. Plachek, L. M. Upton, John E. Norberg, T. Patterson Ross, W. B. Faville, Harris Allen, Matthew O'Brien, Chester H. Miller, John Reid, Jr., Smith O'Brien, Geo. B. McDougall, Edw. G. Bolles, Wm. Mooser, A. G. Headman, H. G. Simpson, Earle B. Bertz, Jas. T. Narbett, Howard E. Burnett, E. B. Hurt, Wm. C. Hays, B. S. Hayne, George W. Kelham, Ernest Coxhead, Henry H. Meyers, Ernest H. Hilderbrand, W. R. Yelland, Morris M. Bruce, Jas. W. Reid, J. W. Dolliver, J. J. Donovan, S. Schnaittacher, E. W. Cannon, J. S. Fairweather

There were also a number of guests present

The Legislation Committee reported progress and read a report on the Treatment House Law, which was referred to the directors to act.

The nominating committee made their report as follows: President, Geo. W. Kelham; vice president, Henry H. Myers; secretary and treasurer, J. Stewart Fairweather; directors for three years, Wm. Mooser, J. H. Blohme. Committee, John Bakewell, W. B. Faville, Chas. P. Weeks, chairman.

After the business meeting the evening was devoted to social entertainment in honor of W. B. Faville, the national president.

Ernest Coxhead presided and addresses were given by Harris Allen, John Reid, Jr., T. Patterson Ross, Jas. W. Reid, Arthur Matthews, Geo. McDougall and others.

There being no further business the meeting adjourned.
J. S. Fairweather, Secy.

WASHINGTON STATE CHAPTER

The October 5th meeting of the Chapter will be the first meeting of the fall season.

(Concluded from page 47)

are the exotics among tree forms and should be used only where their good taste is unquestionable.

Only the dignified, dependable round-headed tree is thoroughly pleasing for massing in large quantities. This form includes all trees having on the whole a top or head comparatively round, but permits of much variety in both surface and outline. This form embraces most of our deciduous trees, Linden, Elm, Oak, Maple, Walnut, Liquidamber, Sycamore, Catalpa, Gingko, flowering fruit trees; and many broad-leaved evergreens such as our Coast Live Oak, Magnolia, many Acacias, Camphor, Laurel, in fact the choice of material is almost unlimited. In mass outline they do violence to neither architectural pile nor domestic cottage, to the dome of the heavens, the roll of the hills, to the plains nor the prairie. They are as much at home in the grace and polished beauty of a highly cultivated landscape as they are in a simple rural setting or in the grandeur and sublimity of Nature's wood acres.

The very comprehensiveness of the round-headed group makes it all the more important to study the individual species for nice distinctions of texture and color. Small leaves, especially if they are delicate and lacy and motile do more than even light color to give a tree the aspect of fragility, grace or even femininity; while large simple leaves impart a bold, masculine air even in small trees like the Magnolia or Catalpa. One would never be tempted to call the biggest Willow or Honey Locust or Birch masculine. This very difference in expression among round-headed trees calls for a grouping and blending to give satisfying, complete feeling to the mass. Too much gracefulness and lightness is apt to be thin and frothy; too much of the masculine material becomes heavy and lumpy. It is better to relieve a light, feathery tree against a group of more solid foliage. The reverse is not true, for the massive and uniform surfaces which make good backgrounds are less pleasing to the eye in the foreground. The Japanese have grasped a nice sense of the value of contrast in their rule of placing a fragile, dependent tree or shrub in close proximity with one of bold, dignified aspect. Nothing could be more beautiful than a double-flowering peach displayed against a stately pine or cedar.

But this question of pleasing combinations leads into a whole new field of discussion, which must be left for another time.

INDUSTRIAL

LOS ANGELES BUILDING PERMITS
OVER \$10,000,000 PER MONTH

BY MORRIS M. RATHBUN

*Publicity Manager, Los Angeles Chamber of
Commerce*

Los Angeles has increased 60 per cent in building records over last year, according to the last United States census report, whereas the average for the rest of the country is 46 per cent increase over 1921. The city still holds third place in point of building activities, coming next to New York and Chicago in value and number of new constructions. For this year the value of building amounts to over \$10,000,000 on the average per month.

Building figures are a leading straw to show which way the wind of prosperity is blowing. A perfect gale of business is indicated in Los Angeles thereby. The industrial output for 1921 exceeded \$800,000,000 and the figure for 1922 is going to pass this total. Since the beginning of the year, 350 new concerns alone have been added. Every type of factory is represented—furniture making, garment and baby carriage manufactories, new oil refineries and lumber mills, paper factories, envelope and chemical plants, hardware and household utensil factories.

The following list of community projects under way, or soon to be developed, speak for the tremendous force back of Los Angeles' growth and the wide-awake civic spirit of its rapidly increasing residents: Biltmore Hotel, \$7,000,000; public library, \$2,000,000; chamber of commerce, \$3,000,000; Union Pacific Terminal, with harbor improvements, \$10,000,000; Union Stock Yards, \$10,000,000; telephone construction, \$9,000,000; Pacific Electric subway, \$2,800,000; gas and electric service extended, \$8,000,000; for the street railroad, 150 new cars; new sewage system, \$10,000,000; railway into San Juan Basin, \$4,500,000; Coliseum, seating 78,000, \$1,000,000; new lumber and logging plants, \$10,000,000; hall of justice, \$3,000,000; new schools, \$17,000,000; Plaza Union Passenger Terminal, \$16,000,000; Los Angeles County bridges and roads, \$500,000; harbor improvements for the year of 1921, \$5,000,000; county building improvements, \$5,705,000; Bethle-

(Concluded on page XVII)

SAN FRANCISCO SETS NEW
CONSTRUCTION RECORD

BY W. S. INGRAM

*Director of Research, San Francisco Chamber
of Commerce*

Construction work under way in San Francisco today is roughly estimated in excess of \$24,000,000.

C. A. Day, industrial director of the San Francisco Chamber of Commerce, a close observer of progress, finds San Francisco is establishing a record.

Building permits issued from January 1 to September 1, totaled \$35,000,000, the highest mark in the history of the city.

The activity embraces all lines of construction for industrial, commercial and residential purposes. The air hammers of riveters resound as great shafts of steel are reared in skeletonizing a skyscraper. Great mixers pour forth their concrete, as this type of construction is used in erecting a modern apartment. Hammers ring as workers put up frame work.

Throughout the city it is a veritable bee hive of builders. The outlying districts show as great activity as the downtown sections, even though the outlay may not be as great.

Chamber of Commerce records show that construction workers are not the only San Franciscans that are establishing records.

Bank clearings for the month of August, totaled \$623,000,000, a gain of \$100,000,000 over August, 1921.

The upward trend continues in postoffice receipts with August aggregating \$558,971. This is an increase of 18 per cent over August, 1921, when the receipts were \$471,380. Receipts for the first eight months of the current year total \$4,082,649, while the revenue for the corresponding period of 1921 was only \$3,725,820.

Record smashing activity also is shown in the real estate line. The real estate sales of 1921, amounting to \$80,863,796 were regarded as a banner year. As large as they were, a huge sum, they will be eclipsed by 1922 realty transactions. Available statistics on the first six months of 1922 show real estate operators consummated deals totaling \$70,581,377, with every indication the same volume will con-

(Concluded on page XVII)

SLATE AS A PERMANENT ROOFING MATERIAL

BY OLIVER BOWLES

(Mineral Technologist, U. S. Bureau of Mines).

During recent months the Bureau of Mines has conducted a detailed study of the slate industry with special reference to increased efficiency in its production, preparation and utilization. The results of these investigations will be incorporated in a forthcoming bulletin. The purpose of this preliminary paper is three-fold. One object is to bring to the attention of slate producers certain modifications in manufacture and classification, which would encourage a wider use of slate. A second purpose is to direct the thought of roofers toward the importance of proper laying of slate, and the third object is to acquaint the general public with its enduring qualities.

It may be of interest to the general reader to know that slate is originally formed from mud or soft clay carried down by streams and laid down in successive layers in deep water. The pressure of superimposed materials gradually compresses the clay into a firm rock known as shale. In many places this shale was, during the succeeding ages, subjected to intense pressure and folding due to mountain-building forces within the earth. This intense pressure, together with high temperature, changed the clay into other minerals such as mica, chlorite, and silica, which are very resistant to weathering, and also developed a very definite cleavage or splitting direction, which characterizes the rock as slate. It is this property which renders slate of value for roofing, for, by using a broad chisel and a wooden mallet, a slate worker can readily split it into thin sheets, which are trimmed into rectangles of various sizes.

Slates should be graded and classified in such a way that the consumer will not be deceived by their characteristics. The most obvious error is, of course, the wholly dishonest practice of some manufacturers in designating slates with names that definitely misrepresent their qualities. Instances have occurred where a purchaser requesting and expecting an unfading slate has been supplied with fading slates simply because the producer could not supply the desired quality, and did not wish to lose the sale. Such operators commonly meet with failure after

(Concluded on page 54)

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BUILDING ACTIVITIES, SAN JOSE,
CALIFORNIA

By F. L. FOSTER

Secretary, San Jose Chamber of Commerce

In San Jose during the year many costly mansions have been and are being built in residential sections and numerous cottages and bungalows ranging from \$5,000 to \$7,000 each. Four new handsome apartment houses have been built and another is being begun. One of the largest fireproof hospital buildings on the Coast is nearing completion; Market street is being further improved by the construction of a large union auto stage depot building, a fireproof and a business block is going up on South Second street. Other improvements that are assured and will soon be begun are St. Patrick's Parochial School, \$100,000; Postoffice addition, \$25,000; County Hospital additions, \$100,000, and Scottish Rite Temple, \$300,000.

(Continued from page 53)

a brief and inglorious period of deception, but during the short span of their activities much harm has been done to the reputation of slate.

Aside from such practices, which are universally condemned by the trade, it is believed that a truer classification of the established grades would render slate more popular. For example, the professional roofer knows the changing effects of "sea green" slate, but the purchaser commonly does not know that the original color alters to various shades. Such variability in color is by no means undesirable, for it gives many beautiful effects, and such slates are much in demand. If the inexperienced purchaser, however, buys "sea green" slate with the object of obtaining a green roof, he will find that he has made a mistake. It would be better, therefore, to employ a more descriptive term for "sea green" such as "wathering green variegated." As the term "sea green" is long-established, it might be bracketed after the new term until the latter had become well known.

The term "variegated" when used alone also leads to confusion. It commonly relates to an unfading, but it may be applied to a fading slate. The experienced dealer knows that "variegated" is a mottled green and purple, but there is nothing in the term to convey this impression to the public. Would it not be better to have trade names that briefly and definitely describe the slates, and that give the purchaser reliable information as to whether the colors are fast or changing?

Slates from some localities are much weaker than from others. Weakness in the material results in excessive waste from breakage in punching, and in the frequent appearance of broken slates in the finished roof. Some slate selling organizations now classify slates according to strength, and adjust prices in conformity with their relative qualities.

Aside from improvements in classification as suggested above, the Bureau of Mines has been led to believe that there are various other ways in which the slate producer could modify his operations so as to render slate more popular, and widen his market. In the first place he should endeavor to cater to the demands of the consuming trade in so far as such demands do not impair the quality of the product. One of these demands is

for a thickness sufficient to prevent excessive breakage. In certain regions slate splits with great freedom, giving thin uniform slabs. As slate is sold on the basis of surface area, it is obvious that a slate maker can obtain greater returns from a block split into thin slabs, than he can obtain from the same block split into thick ones. Also the weight per square is less, which involves lower charges for haulage. Consequently there is a tendency to make thin slates from free-splitting rock. If slates fall below $3/16$ inch in thickness they are likely to be so weakened that undue losses occur from breakage during punching and laying. While such breakage may involve the loss of considerable slate, there are even more serious aspects to the use of weak slates. The staging which supports the workmen while they place the upper courses of a roof must rest on the lower courses already finished, and its supports may break weak slates in these lower courses. Furthermore painters, window cleaners and other workers may at various times find occasion to stand on the roof, with resulting breakage of weak slates. Such breakages involve replacement of broken slates on the finished roof, which is somewhat difficult, and slates so placed are never as satisfactory as the original ones. The annoyance and expense involved in the use of weak slates has had a detrimental influence on the use of slate, and it is believed that if slate producers would maintain a thickness a little greater than $3/16$ inch rather than less, the advantage gained from the better service to the consumer would be ample to offset the slight saving in material or in the freight charges involved in making the thinner ones. Rejections of orders have resulted from deficiency in thickness of slates, and it is much better to keep right up to standard or even to excel it, for a satisfied customer brings repeated orders, and a satisfactory roof is the very best advertisement.

In some instances slate roofs have not given satisfactory service, and it is important to point out the chief reasons for the failure of such roofs to fulfill the expectations of the purchaser. To secure a roof of high quality, part of the responsibility rests on the roofing contractor. The contractor's duty is to lay the slate on the roof in accordance with the most approved practice. It is commonly stated that any carpenter can lay slate, and many roofs are laid by inexperienced workmen. Slate roofs give much better service when placed by men who specialize in such

(Continued on page XIV)

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WHAT IS THE OBJECTIVE?

By F. A. WELLS,

Vice-President and Treas., Wells Bros., Construction Co., Monadnock Block, Chicago

What is the Best Form of Building Construction Contract? Is there a "best" form, taking into consideration the interests of all directly concerned?

Certainly there are forms of contract which any reputable architect, engineer or owner ought not to ask a general contractor to sign. The Government of the United States, (unless it has altered its form recently), is the most notorious violator of equity in this matter. The Postoffice in the hospitable and beautiful city of New Orleans in which we meet was delayed 28 months by the Government in order to make changes to suit altered conditions necessary to operation. The delay cost the general contractor many thousands of dollars. The Supreme Court, acknowledging the equity of the claim, said in its decision, that it could do nothing, its hands being tied because the form of contract, while unfair and inequitable, had been signed by the contractor.

What, then, is the Real Objective in a Construction Contract?

1. Is it to get a building for an owner at less than cost?

2.—Is it to hedge a contractor about with such conditions that all incentive is taken from him, but that of trying to avoid the unfair conditions?

3.—Is it to bind him by general and broad clauses to agree to do the impossible, and thus acknowledge before he started the work of construction that he need not be treated as a man but watched like a culprit?

4.—Is it to give the tricky, unreasonable contractor a chance to twist every clause in its interpretation so that he may avoid responsibility and increase profits?

5.—Is it to give the responsible contractor an opportunity to make the largest possible profit rather than produce a building for the owner at the most reasonable price? or

6.—Should the contract be of such equitable form that it will call out all that is best in the contractor and his organization and produce that co-operation between owner, architect, engineer and contractor, which can only result in a successful piece of construction as to economy in both time and money?

I believe that a builder will demonstrate

the most skill, integrity and efficiency when the owner, architect and engineer will trust him and express their confidence in a fixed fee form of contract.

I know this to be true in the case of our own company. We have operated exclusively on this basis for the past four years. We favor it so strongly that we take every opportunity to talk about it. There is something solid about the idea. It is not to be exhausted in a few words—the reason is, perhaps, that it is a step in evolution in form and method—

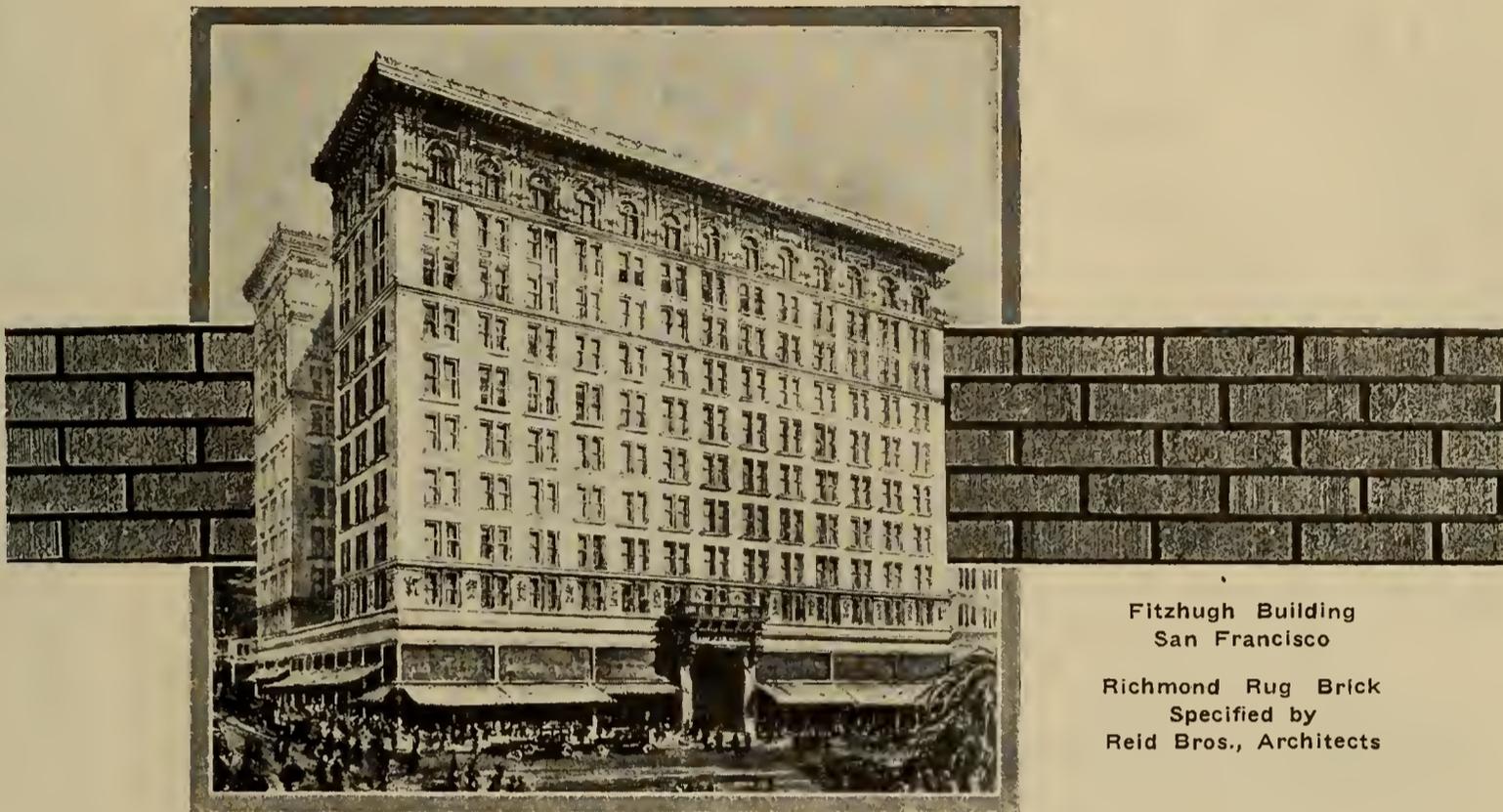
The Associated General Contractors should do more than merely watch the evolution of building contracts and the methods of building contractors. They do not evolve themselves. The Association can furnish the power to push energetically towards those forms which will draw out of the Building Fraternity the best there is in it. Many architects and engineers will unquestionably help to promote the more general use of the fixed fee building contract but that will not be enough. We, as an association, are striving for higher ideals among our membership and fraternity. I know of no means whereby ideals can be uplifted so certainly as by having the owners trust us. When our Association stands clearly for the skill, integrity and responsibility of the building industry, our members will have the confidence of the public as never before. The ideal relationship of architect, engineer, owner and contractor will then be possible, founded upon mutual confidence and resulting in complete co-operation to produce the best structure.

Owners do not trust the contractor under a lump sum contract. They do not even trust him not to go "broke"—they exact a bond against that contingency.

Architects have always been trusted, being employed on a professional service basis. The great majority of them merit that trust yet some among them have turned to a flat fee basis of remuneration in the belief that owners have greater confidence in their singleness of purpose under that plan. The temptation under the percentage fee plan to make the building cost a maximum is a real factor in the minds of many owners when making their decision. How much trust would an owner put in an architect who named a sum at which he would design and produce a certain building, taking as profit all the difference between actual cost and the named figure?

Architecture has been maintained as a profession, due in no small measure to the basis

(Continued on page XVI)



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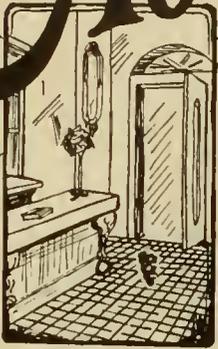
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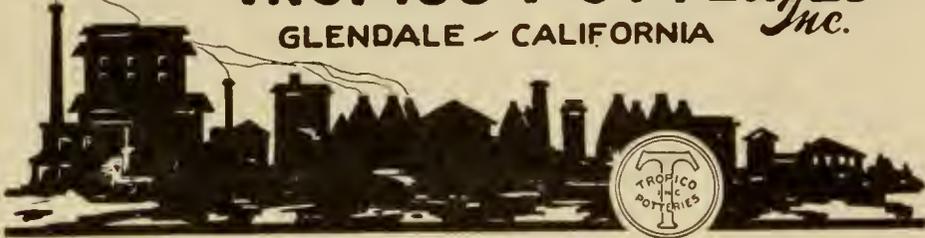
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A twenty-four page booklet devoted to the subject of proper treatment of lumber for industrial buildings. Such subjects as Wood Preservation, Processes used in Timber Treatment, Preparation of Wood Block Floors and Pavements, etc., are covered in detail. The Century Wood Preserving Company, Century Building, Pittsburg, Pa.

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HOW TO BUILD A BETTER HOME

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BOOK REVIEW

"Architectural Drawing" by Wooster Bard Field, assistant professor of Engineering Drawing at Ohio State University, published by McGraw-Hill Book Co., 370 Seventh Avenue, New York, is a very practical and compact aid to the architectural draftsman. After describing briefly the methods of work and instruments used, it illustrates and describes the regular procedure of drawings in an architect's office, from the initial sketches to working plans and details. Plates on the classic orders, mouldings and lettering are included, and a suggested outline for study.

This should prove a valuable book both for students and for junior draftsmen.



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BRANCHES IN PRINCIPAL CITIES

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work. For example, most carpenters in placing slates drive the nails "home," just as they would in securing wooden shingles, with the result that when the sheeting dries and shrinks the slates are cracked. A skilled slate roofer does not drive the nail to its full depth, but allows the slate to hang loosely.

Another common error is due to mistaken economy or, in some instances, even dishonesty on the part of the roofer, for in order to save slates he may give a head-lap less than the regulation requirement of three inches. As a result the roof may leak, not through any fault of the material, but through improper workmanship. The law in some states renders it illegal to place slate with less than a three-inch head-lap.

Occasionally the nail holes in slates are punched by the manufacturer before shipment. However, the practical roofer usually punches the slates at the place where they are to be used, and during the punching process he selects them into three grades, thin, medium, and thick. The heaviest slates are then placed near the eaves, those of medium thickness midway, and the lightest at the ridge, which gives a very uniform roof.

The art of laying slates involves many other important features, but the points referred to above are sufficient to indicate that a grave responsibility rests on the roofing contractor. Upon him, to a great extent, the reputation of slate depends, and his efficient and honest service is reflected in the satisfaction of all those who may be sheltered by the roof of his construction.

No practical roofing material has yet been found that can excel natural slate for permanence or satisfactory service. In judging the permanence of a roof, the age of the building it covers is commonly regarded as being the age of the roof, but this may not be a true criterion. It is reported that in the Peach Bottom slate district in Pennsylvania and Maryland the same slates were used on seven successive buildings during a period of over 100 years, and in England slates have commonly been moved from one structure to another. American history covers so brief a period that it can properly record only the initial stages of the life of a slate roof, and on this account multitudes of people have little conception of the actual period of useful service a slate roof is capable of rendering. Consequently one must go to the old world to obtain records of real value. In England and Wales, and in France many buildings

constructed in the 15th and 16th centuries were roofed with slate, and the roofs are still in excellent conditions. There is a record of a chapel in Bedford-on-Avon in Wiltshire, England, roofed with slate in the eighth century, and after 1200 years of climatic exposure the roof is moss-covered, but in good condition.

Every householder knows that a leaky roof not only is a source of continual annoyance, but that it seriously impairs the walls and ceiling, and probably the contents of the structure that it is designed to protect. In the first place, therefore, it is well to point out that properly manufactured slates laid according to established practice on uniform and strong supports of moderately steep pitch will provide a roof that will not leak. Furthermore, as pointed out in earlier paragraphs, a roof so constructed will maintain its quality for very many years without any repairs or treatment other than the occasional replacement of a broken slate. A more general recognition of the inherent qualities of slate would no doubt lead to its wider use, for, while the first cost is greater than that of many types of roofing, low maintenance and replacement costs render it an inexpensive roofing material when long service is considered.

With so many available convincing records of the durability of slate roofs, it is somewhat surprising that so many permanent homes and other structures employ less enduring roofing materials. This is no doubt due in part to the lower cost of the more temporary types, and in part to the aggressive advertising of competitors.

The modern tendency toward speculative building has a similar influence, for structures built to sell are commonly covered with the cheaper and less durable types of roofing. A wider knowledge of the excellence of slate on the part of the purchasing public, and a growing demand for roofs of standard quality would tend to discourage the use of roofing that from time to time must be repaired or even completely renewed.

The Bureau of Mines makes no claim that slate is the only permanent roofing material. There are various other types of mineral roofing that are enduring and satisfactory, but the Bureau has not yet been able to undertake a special study of them.

Efficient and painstaking workmanship is one of the surest roads to success in any slate manufacturing enterprise. The sacrifice of

(Concluded on page XVII)

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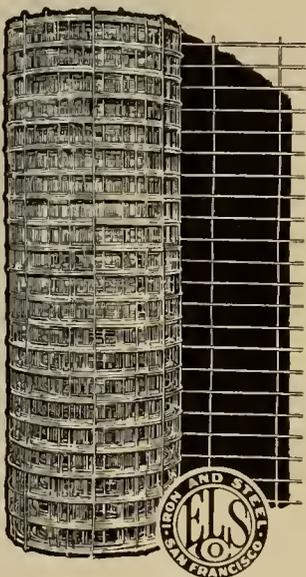
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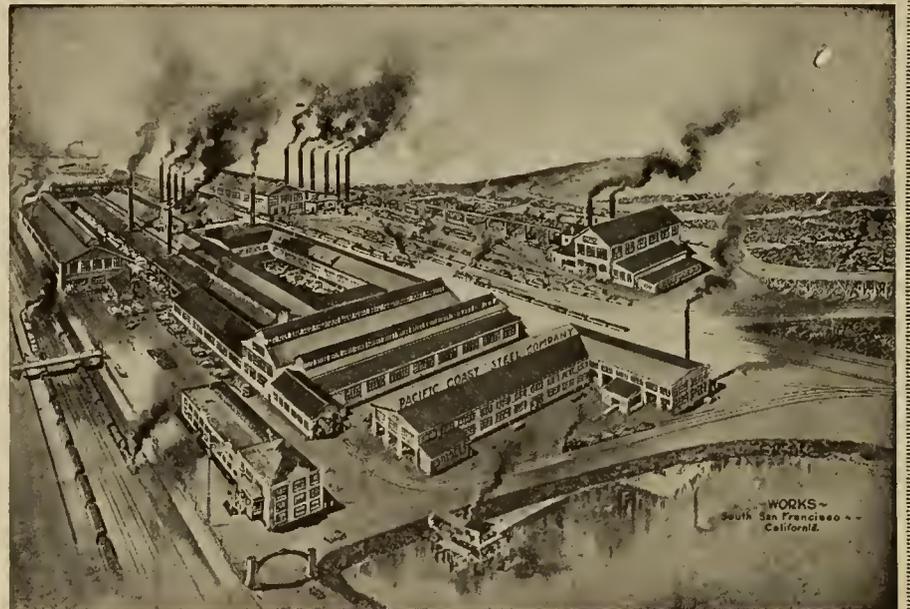
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(Concluded from page 56)

of charge for services rendered. Construction work, on the other hand, has been commercialized. Its doors have been opened so wide that the capable and responsible contractor has been put in competition with the careless, incapable and sometimes dishonest one, and the responsible bidder is often offered the contract at the irresponsible one's price.

Under the fixed fee contract method of engaging the Builder all this is avoided, and the reputation, experience and responsibility of the Builder will receive its just recognition.

By the latter method, building construction becomes a profession; but not where the spirit of trust is lacking, not where the owner, his architect and engineer are constantly watching that the contractor does not gouge him by inferior work or by an unconscionable price for extras and changes; not where the interests of owner and contractor are diametrically opposed so that a decision in favor of one must of necessity be unfavorable to the other. Rather does it become a profession when owner and architect seek a responsible builder of known integrity and entrust the work to him, satisfied that the builder will exercise all the skill and integrity of his organization to make a creditable building, on time and at the least possible cost commensurate with quality.

Shall we not accept the suggestion of some leading architects who have gone from percentage fee to fixed fee for the Architect's services in order to win more owner confidence? Will not the owner and all who serve him be benefited by changing from the lump sum of contract for construction to the fixed fee basis of remuneration for the builder's services? In our opinion the building industry will make its greatest advance when we seek the confidence of owner, architect and engineer and then justify that confidence.

This, then, is why I plead for the fixed form of contract. I believe it accomplishes the two most important objectives;

First: It will attract to the Construction Industry men of integrity, capability and responsibility. When this has been fully accomplished, the second objective will be realized.

Second: It will produce for owner, architect and engineer the best possible building for the least possible cost in the shortest period of time commensurate with quality all made possible because the Builder shares their interests under the fixed fee form of contract.

The objective of the Associated General Contractors must be to place general contracting as a whole on the highest possible plane of responsibility. We must not be the three-ball depository of the gains of the "artful dodger", but the national banks of integrity and ability to which owners can come with confidence when they need to draw upon our services.

STATEMENT OF OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST, 24, 1912,

Of The Building Review, published monthly at San Francisco, Calif., for April 1st, 1922.

State of California, County of San Francisco—ss.

Before me, a Notary Public, in and for the State and County aforesaid, personally appeared H. R. Braden, who, having been duly sworn according to law, deposes and says that he is the Business Manager of The Building Review, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form, to-wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are:

Publisher, The Building Review Company, 50 Main Street, San Francisco.

Editor, Harris Allen, 50 Main Street, San Francisco.

Industrial Editor, Heward Hoyt, 50 Main Street, San Francisco.

Business Manager, H. R. Braden, 50 Main Street, San Francisco.

2. That the owners are: (Give names and addresses of individual owners, or, if a corporation, give its name and the names and addresses of stockholders owning or holding 1 per cent or more of the total amount of stock.)

Harris Allen, Central Bank Bldg, Oakland.

A. Hoffman, 245 Mission Street, San Francisco.

J. A. Drummond, 245 Mission Street, San Francisco.

H. R. Braden, 50 Main Street, San Francisco.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.)

None.

4. That the paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is (This information is required from daily publications only.)

H. R. BRADEN, Business Manager.

Sworn to and subscribed before me this 11th day of October, 1922.

(SEAL)

D. B. RICHARDS,

(My commission expires May 26, 1925.)

(Concluded from page 52)

hem Steel Corporation making additions at shipyards in Los Angeles amount to many thousands of dollars. During the past months of 1922 there have been five months with a total of more than \$10,000,000 invested in new homes, factories, business blocks and studios. The month of September records \$10,267,894.

(Concluded from page 52)

tinue, thereby setting a new mark in this line of endeavor.

Shipping circles of the port of San Francisco also reflect the same rush characterizing other commercial pursuits. Figures of the marine department of the Chamber of Commerce show 507 vessels of all descriptions "arrived" during the month of August, a gain of 43 per cent over August, 1921.

The 507 vessels brought rich cargoes from the Orient, from Central and South America, from Mexico, from many European ports, from Atlantic and Pacific ports—representing a monetary value of many millions of dollars.

With regular trade circles keeping step with construction in briskness, hundreds of captains of industry have found time to lend support to another building program. This building program has for its slogan, "Make San Francisco Supreme". Its purpose is to expand the Chamber of Commerce, adding 2000 new members who will take their place in the ranks of enthusiastic San Franciscans for the upbuilding of the city.

(Concluded from page XIV)

quality for volume of output may give larger returns for a limited period, but excellence in the produce is a fundamental requirement of a permanent business. Throughout the slate regions of the United States the selling agencies are constantly receiving orders with the proviso attached that they must be filled only by certain reliable companies who have given dependable service in the past. Careful workmanship and true classification of products by the manufacturer, together with honest and efficient service on the part of the roofer, would go far toward establishing slate in its rightful place as an attractive and permanent weatherproof material adapted for universal use.

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A QUESTIONNAIRE

A questionnaire has been sent to firms in Alameda County, and we print a copy with answers as given by a local architect.

The Educational Committee of Organized Labor, Alameda County Branch, would respectfully ask the individual or firm receiving this communication to answer the questions below and mail the reply to Wm. A. Spooner, 1030 Franklin street, Oakland, Cal.

These inquiries are made in good faith by this committee, who represent many thousands of our residents whose purchasing power is a tremendous asset in the community.

We would request that you give us an early reply—first giving the enclosed pamphlet a careful reading—in order that your answers may be classified at an early date.

Are you a member of the Chamber of Commerce?

Yes.

Do you believe in the right of labor to organize for its protection and betterment?

Yes.

If you have been a contributor to the C. of C. in its recent drive for a permanent maintenance fund, do you think this fund should be used to fight organized labor?

Only if organized labor acts in opposition to public welfare.

If this fund is being used to fight organized labor, will you continue donating to it?

Yes, under the above conditions.

Do you believe that well paid labor is more beneficial than cheap labor with a limited purchasing power?

Yes.

Do you believe that dealers in any merchandise or commodities should be permitted to refuse to sell to any responsible buyer?

As much as any man is permitted to refuse to sell his labor to any responsible buyer.

Are you in favor of giving our resident workers employment in preference to the non-resident worker brought to this community to break down the wage scales and working conditions of the permanent resident workers?

Yes, excepting only in case of necessity.

AMENDMENT AFFECTING STEEL JOIST FLOOR AND ROOF CONSTRUCTION PASSED TO PRINT

BILL NO. 6125. Ordinance No. —. (New Series). AMENDING ORDINANCE NO. 1008 (New Series), KNOWN AS THE BUILDING LAW OF THE CITY AND COUNTY OF SAN FRANCISCO. APPROVED DECEMBER 22, 1909, BY ADDING A NEW SECTION THERETO, TO BE NUMBERED SECTION 120A, RELATING TO STEEL JOIST FLOOR AND ROOF CONSTRUCTION IN CLASS "B" AND "C" BUILDINGS.

BE it ordained by the People of the City and County of San Francisco as follows:

Section 1. Ordinance No. 1008 (New Series), known as the "Building Law", is hereby amended by adding a new section thereto, and numbered Section 120A and to read as follows:

Section 120A. STEEL JOIST FLOOR AND ROOF CONSTRUCTION IN CLASS "B" AND "C" BUILDINGS. FORMED STEEL JOIST FLOOR AND ROOF CONSTRUCTION shall be permitted anywhere in the city for dwellings, office buildings, apartment houses, tenement houses, hotels, hospitals requiring not more than forty (40) pounds live load per square foot of superficial surface, when supported on a steel frame complying with the requirements of Sections 48, 49 and 50 of the "Building law of the City and County of San Francisco," and fire-proofed according to the provisions of Sections 104 and 105 of the building law.

Steel frame tie beams used in this construction shall have a depth at least one-twenty-fourth (1/24) of their span, and shall be no lighter than 6"-1-12-1/2 section. They shall be riveted to the columns with at least four (4) 3/4 inch rivets.

Metal joists shall meet the requirements specified for unit stresses in Section 48 of the building law and their maximum spacing shall not exceed twenty-four (24) inches center to center. Tension bridging shall be spaced at not more than six (6) foot intervals measured along the joists.

Ribbed metal lath shall be secured to the tops of the joists. This lath shall be no lighter than twenty-four (24) gauge and shall have the minimum sectional areas specified in Section 113-B of the building law for slab reinforcement. This lath shall constitute the reinforcing for the concrete slab.

The lath shall be covered with a concrete slab at least two (2) inches thick for all roofs, and for the floors of dwellings, apartment houses, tenements and hotels. Floor slabs of office buildings, hospitals and other buildings shall have two and one-half (2 1/2) inches minimum thickness.

The under surface of the joists shall be fireproofed with a layer of twenty-four (24) gauge metal lath, plastered with a seven-eighths (7/8) inch thickness of cement plaster and this fireproofing shall be securely fastened to or suspended from the joists.

Formed steel joist floor construction shall be limited to eight stories above the sidewalk.

This construction may also be built upon Class "C" frames as specified in Part IX of the building law.

Section 2. This ordinance shall take effect immediately.

PASSED FOR PRINTING—Board of Supervisors, San Francisco, September 25, 1922.

Ayes: Supervisors Colman, Deasy, Hynes, McGregor, McSheehy, Morgan, Mulvihill, Powers, Robb, Rossi, Scott, Shannon, Wetmore.

Absent: Supervisors Bath, Hayden, McLeran, Schmitz, Welch.

J. S. DUNNIGAN, Clerk.

Southern California Architects== Hunt & Burns

THE
BUILDING
REVIEW



NOVEMBER, 1922

Vol. XXII

No. 5

*Published at
50 Main Street, San Francisco*

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THE BUILDING REVIEW

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The BUILDING REVIEW

VOL. XXII

SAN FRANCISCO, NOVEMBER, 1922

No. 5



ESTATE OF WM. MEADE ORR ALHAMBRA, CALIFORNIA
HUNT AND BURNS, Architects

Southern California Architects

Hunt and Burns---Experts on Clubhouses

By HARRIS ALLEN

Sumner P. Hunt and Silas R. Burns are men that the building committee of a club or institution must view with relief. There is a comforting air of authority, of experience about them, of well-balanced judgment, combined with a definite impression of trustworthiness. I am sure that if I were representing a large number of people in the expen-

diture of a considerable sum of money, the first sight of these gentlemen would inspire me with confidence, and after one conversation I should thankfully transfer the responsibility to their shoulders, feeling sure that by so doing I was best serving my constituents. Such an effect is not produced by extreme youth or age.



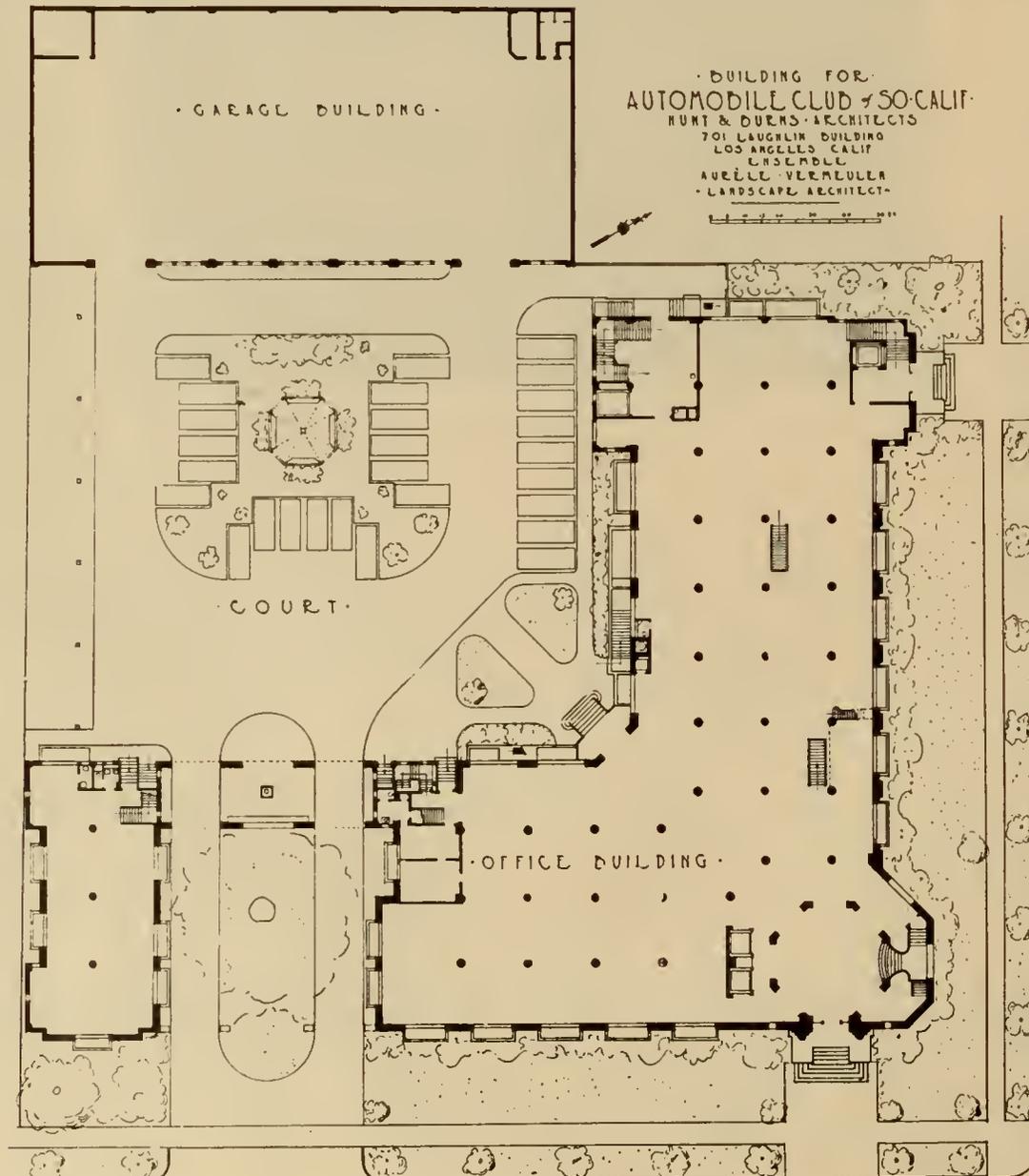
LOUNGING ROOM
WILSHIRE COUNTRY CLUB



DINING ROOM
LOS ANGELES, CALIFORNIA

Mr. Hunt is at that pleasant stage known as "the prime of life," when a man's mature powers are at their height, and which lasts for a quite indefinite period in California. In early life, circumstances forced him into organization and executive work. It was to some extent incidental that this happened to be connected with architecture. I imagine if Mr. Hunt had started as clerk in a railroad office

or in a great manufacturing plant, he would be head of the company today, for he is a born executive. But it was an architect's office, and the problems of construction, the creation of buildings adequate for their purpose, interested him. So he has applied that clear-thinking, systematic brain machine of his to the proper administration of architectural duties and functions and responsibilities.





ROOSEVELT HIGH SCHOOL
LOS ANGELES, CALIFORNIA

Such a man is bound to have authority and position pressed upon him by different bodies, for an architect's career brings him into contact with many and various classes of men. Of interest to us is the fact that Mr. Hunt is serving as President of the Southern California Chapter of the American Institute of Architects with conspicuous success.

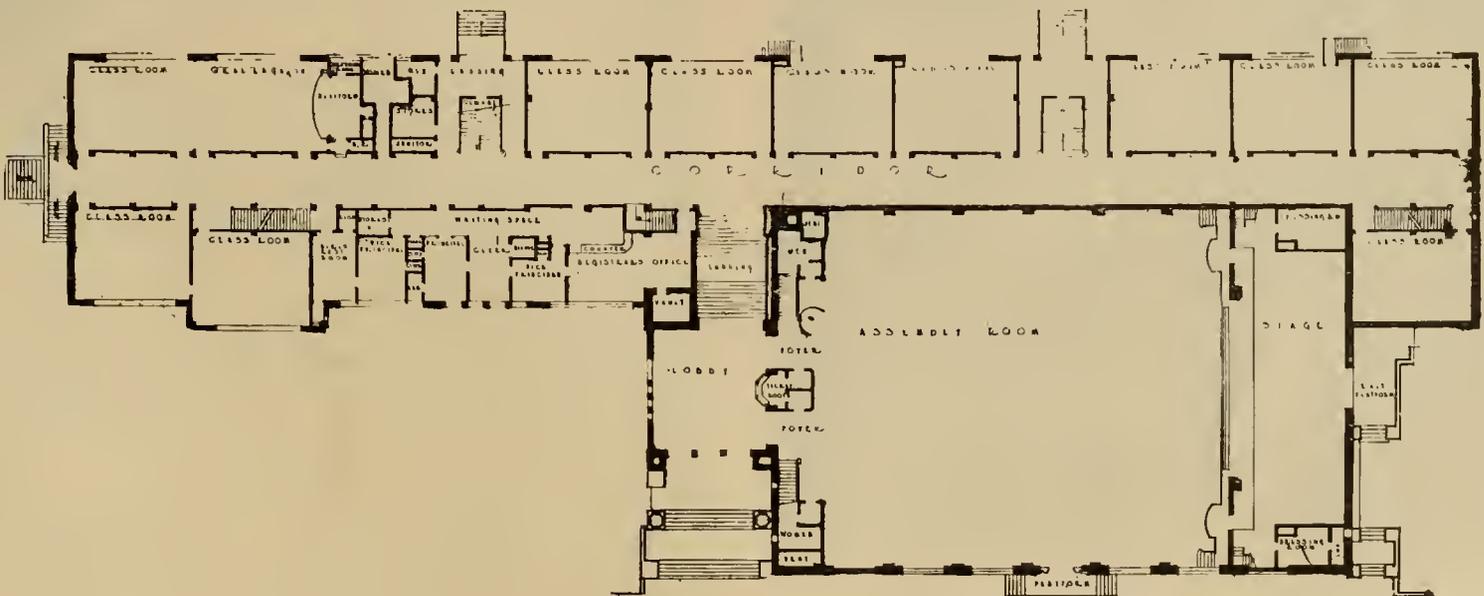
While the inner work of the office is more directly under the guidance of Mr. Burns, still the influence of the senior partner can be followed in the clear, lucid planning of the larger buildings; no matter how elaborate the requirements, the arrangement is always logical and the sequences natural. It is evident that the element of ample and convenient "circulation," which is frequently overlooked in American plans, is considered by this firm to be an essential part of every problem.

There is a well-worn old Latin motto which can be applied, it seems to me, to the general output of Hunt and Burns: "*mens sana in corpore sano*"—a healthy mind in a healthy body. The exterior treatment of their buildings is almost invariably a clear, straight-forward expression of the plan, with very little ornament, and that not superfluous, but clearly in line with Ruskin's dictum that construction may be ornamented, but ornament should not be con-

structed. An occasional entrance emphasized—and the rest depends for its architecture upon scale and balance.

This is a severe test; and much of the firm's work is well able to stand it. Certainly, among the buildings here shown, there are few, if any, which are liable to appear passé and tiresome with the lapse of years. There is no labored stylistic treatment, no wholesale appropriation of another man's design, ancient or modern. With the exception of the Automobile Club, there is no deliberate striving for effect; and in that case, one of the principal requirements, insisted upon by the Club, was to produce a feature which should be a sort of architectural "Stop, Look, and Listen!" which no motorist, no matter how near the speed limit, could pass without noticing.

There are many excellent points to the Automobile Club which can not be appreciated in a photograph; the window treatment, for instance, which preserves the architectural character and yet provides the interior—and this is in reality largely an office building—with abundance of light, including the basement. The interior is not fully finished yet, but it is clear that the rotunda, which forms the main entrance and stair hall at the corner, is going to be a very interesting and



PLAN OF ROOSEVELT HIGH SCHOOL

successful feature. The other special rooms, the dining room and the director's room, promise to be effective, especially for the beautifully curved great concrete trusses which span the dining room.

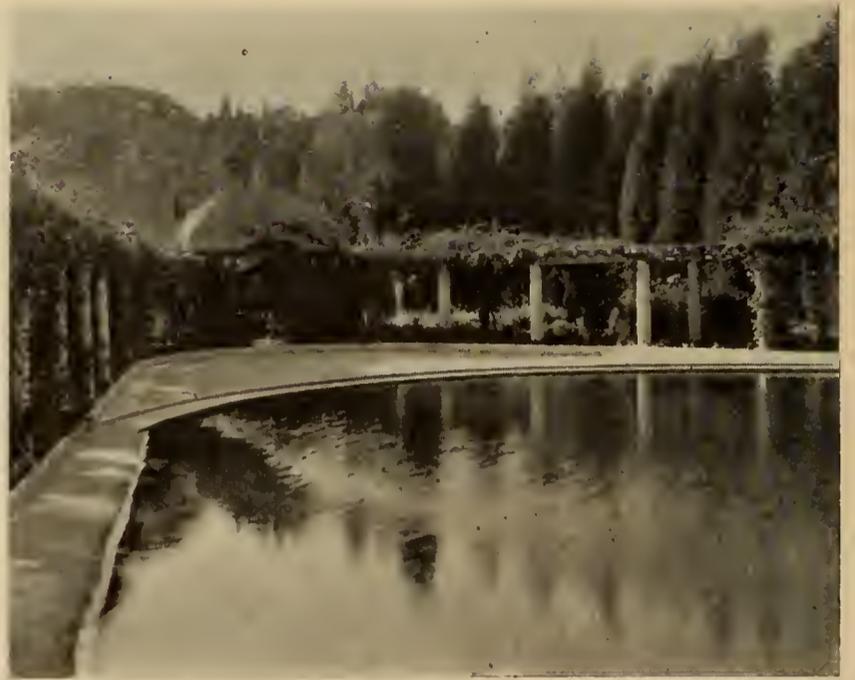
The Wilshire Country Club is very pleasant to the eye, with dull pink walls and a fine expanse of tile roof, generally brown in effect. It is a bit suggestive of a nunnery, with high secluding wall and cloistered entrance, through which one catches glimpses of a patio garden; here well may disillusioned golfers make vows to lead a better life. The great end window throws light on the proper vestment for both inner and outer man, for the kitchen is below and a dressing room above, with wall lockers in the projections under the clerestory windows.

The facade toward the links is frankly designed for observation, but is picturesque in any event. An effective feature is the long flogged walks with irregular, grass-grown joints. Awnings contribute to the effect, as they do to such a marked extent all through Los Angeles with the conditions of strong sunlight the southern climate produces. The long awning which extends the veranda space at one side of the patio gives a delightful contrast to the sunny sheltered, formal garden; a grateful resting place on a hot day.

The great room which is the setting for the inner life of the club is cheerful and unusual; there is no wood showing, except ceiling beams and doors, even the casings being reduced to a small plain ground, painted a slightly different color from the walls. These are very rough plaster, painted a strong, warm yellow, with lighter yellow stenciled borders and decorations mostly in blue, consisting of



ESTATE OF CAPTAIN SPAULDING
LOS ANGELES, CALIFORNIA



ESTATE OF CAPTAIN SPAULDING
LOS ANGELES, CALIFORNIA

tapestries and mural panels. The dining room has plaster walls in ivory paint, with grayish brown wood ceiling, and effective iron fixtures with orange colored bowls. It is a pleasant room. The interior decoration of the Club was worked out in collaboration with Mrs. Katherine Van Dyke.

The Los Angeles Country Club has been in existence long enough to be judged as a finished product. The great poplar trees, for example, were planted by Mr. Hunt about twelve years ago, a growth hard to credit (if you are not a Californian). So this building has fairly grown into its site, and certainly no one could resist the unaffected, comfortable spirit of country life and hospitality which it radiates. This comes close to being genuine American Architecture. It is not academically Colonial (if there be such a thing), but it is permeated with Colonial feeling. Charles Platt might have done it; and he has caught the Colonial flavor more than any man now practising, that I know of. Its long horizontal lines suit the level stretches of velvety turf; the vines and planting could hardly be improved. Its carriage entrance is welcoming but not revealing. It is easy to understand why the 1200 members of the Club have never tired of their home, nor changed it except in refreshing the furnishings or adding a wing when absolutely forced to increase their floor space. Fortunately, this has been possible without injuring the tranquil facade of the main building. Incidentally—there may be better golf in Heaven; but who cares to die, if he can play the thirty-six holes of the Los Angeles Country Club?

The Virginia Country Club is new, but the pleasing simplicity of its proportions and lines

(Continued on Page 64)

THE GARDEN

BERRIED SHRUBS

By MISS KATHERINE JONES

Delivered before the Garden Club of Alameda County

Mr. Wilson, in his numerous trips to China, succeeded in introducing to us a new class of plant materials—or at least has increased their popularity. I refer to the berried shrubs.

By berried shrubs we mean those whose fruits are conspicuous and beautiful enough to be ornamental. They should be reasonably persistent, fairly abundant, arranged with the berries well in sight and ripe before the holiday season when flowers are scarce or almost entirely lacking. After Christmas, when the Daffodils and other bulbs gladden our hearts with their bright yellow blooms and when the deciduous trees are sending forth their tender green leaves, the scarlet berries do not seem to fit into nature's color scheme, nor are they so attractive to us as they are in the fall and early winter months when the leaves are dark and somber and need the scarlet fruit as a complement to the green foliage.

In the selection of berried shrubs we should pay attention to three things: the foliage effect, the flower effect, and the berry effect, since all three are concerned in the grand total.

FOLIAGE EFFECT, amount, color and texture of leaves.

1. Amount of leaves—Deciduous shrubs often do not have sufficient foliage to show off the berries to good advantage since they cannot usually make a fine show of berries and also abundant foliage at the same time. In such cases we should furnish these plants with a good background of green to contrast with the berries.

2. Color of leaves.—In general, good green leaves should go with scarlet berries. For example, *Pyracantha crenulata* with the green type of leaf heightens the color of the berries while the type with gray leaves deadens the color of the berries. An exception to this green color of the leaves might be plants like the *Nandina domestica*, whose leaves color with the berries and serve to heighten their effect.

3. Leaf Texture.—If berried shrubs are to be massed in with other shrubs care must be taken to use those of like texture. One with a shining leaf does not usually look well with a dull leaf. *Coprosma baueri* does not combine well with most of our berried shrubs. Its leaves are so shining that they reflect the light and deaden the appearance of the others. Be-

sides that, its foliage is weedy looking compared with the good dark green of the Christmas berry or with that of the Strawberry Tree.

FLOWER EFFECT.—Most of these berried shrubs flower in the spring with a fine burst of bloom fully as handsome as most of our spring deciduous shrubs. Many of these flowers are pinkish white and are either borne in clusters or singly or in small groups similar to the clusters of berries. While some berried shrubs are handsome in bloom others are rather dull, due to their irregular flowering period (*Cotoneaster franchetii*) or to their habit of hiding their flowers under their leaves (*Cotoneaster acuminata*).

BERRY EFFECT.—1. Color.—In the eastern United States berried shrubs have long been in favor on account of the contrast between the berries and the white snow. Here in California where we seldom see the snow we use berries for their fall and winter effect. They may take the place of flowers in our garden scheme or may be a welcome addition to the flowers. The berry should be bright, preferably white or red or some shade of red. This is because our leaves become dark and somber toward fall and need a touch of bright color to brighten the gloom.

2. Persistence of berries.—The choice of a berried shrub will often depend upon the length of time the berries remain upon the stem. While the fruits of *Crataegus mollis* are especially large and attractive they drop as soon as ripe and absolutely ruin the picture you are endeavoring to create. On the other hand *Pyracantha angustifolia* has the berries ripe from October until June which give a color note to the garden in the fall and winter when most barren of flowers. Between these two extremes we find many degrees of persistence of berries. *Pyracantha coccinea lalandii* on the University campus drops its berries by October or November, while in Southern California this same species retains its berries until Christmas time. On the other hand *Pyracantha crenulata* has already lost its berries (through birds) in Southern California, while here they are still in their prime and may last a month longer. Birds are already eating the berries of *Cotoneaster franchetii*, while those of *Cotoneaster pannosa* will prob-

(Continued on Page 65)

EDITORIAL



RESIDENCE OF JAMES ATKINSON
LOS ANGELES, CALIFORNIA

HUNT & BURNS, ARCHITECTS

It appears to have been clearly established by the great building activity and general increase in business prosperity of the past summer, that the "American Plan" is a success. And so long as no punitive or vindictive measures are taken, Labor itself, or at least the great element of industrious and intelligent members of that class, is likely to recognize the fact and accept its share in the volume of business.

Common sense and prudent foresight alone, would dictate the avoidance of any action that was not fair, just, above-board, and in accordance with the principles declared in connection with the American Plan. If it is true, as declared by the Carpenters' Council, that subcontractors have been removed from jobs because they employed union men, or that the discharge of old and trusted employees has been forced for no other reason than that they were union men, such actions should be immediately disclaimed and condemned by all who have the real interests of the community at heart. This would be a short-sighted policy indeed. The day has gone by when any concern depending on public good will for its success, can violate its own published agreement.

The very principle from which the American Plan was evolved is at stake. "The right of any person to seek, secure and retain work

for which he is fitted, and the right of the employer to engage or dismiss employes, should not be abridged or denied because of membership or lack of membership in any organization or association of any kind."

This principle must be maintained, and it must apply to all cases, if our prosperity is to be real and permanent. The American Plan is based upon what America stands for—equal opportunity, and no special privilege for any class or person. Spite or greed must not interfere with the upholding of this standard.

In an able editorial, *The Western Architect* announces the appointment of a new group of Advisory Editors. We reprint a paragraph which seems to us excellently expressed:

The Western Architect considers itself indeed honored that these men are willing to devote of their time and energy to aid in up-building of a magazine which desires to give the west its medium of expression. But, and this fact is thoroughly understood, the service is not for *The Western Architect*; it is for the profession of architecture. A strong journal is essential to the advance of any profession, and most of us believe there is going on a virile development in the Art. That this shall have expression; and, conversely, that a record of progress shall be available, is essential.



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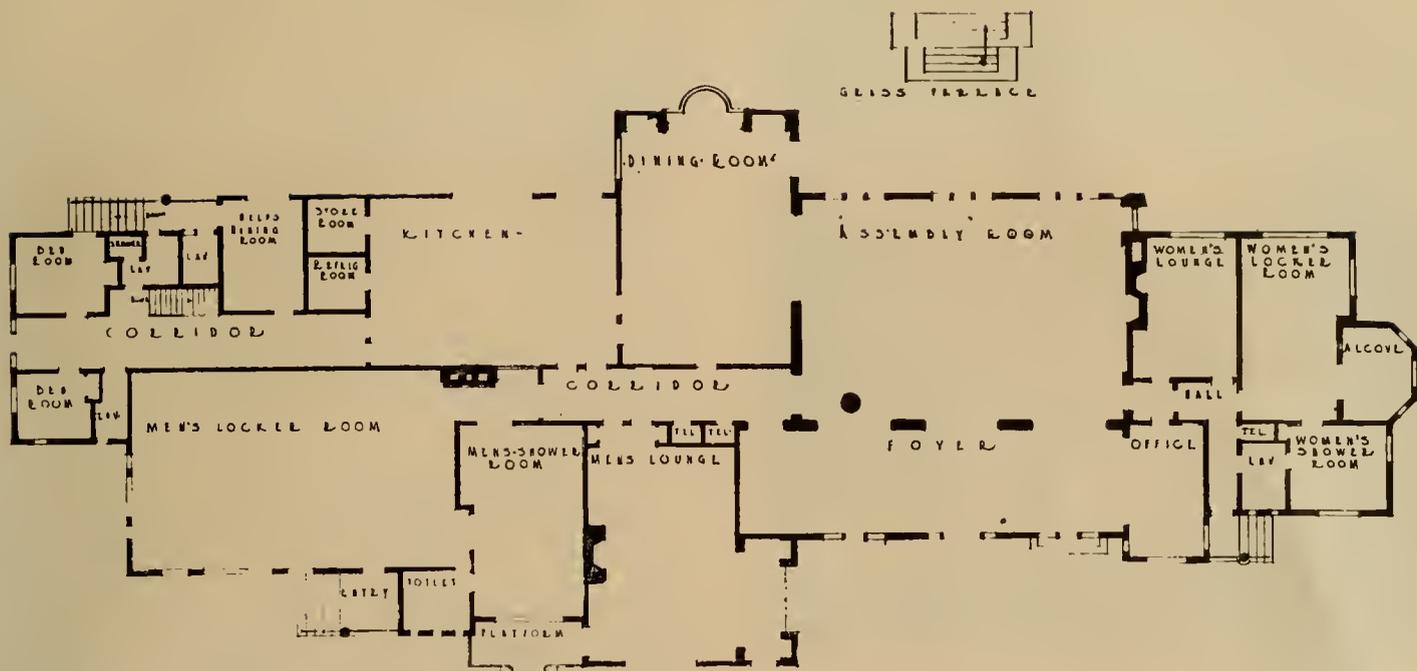


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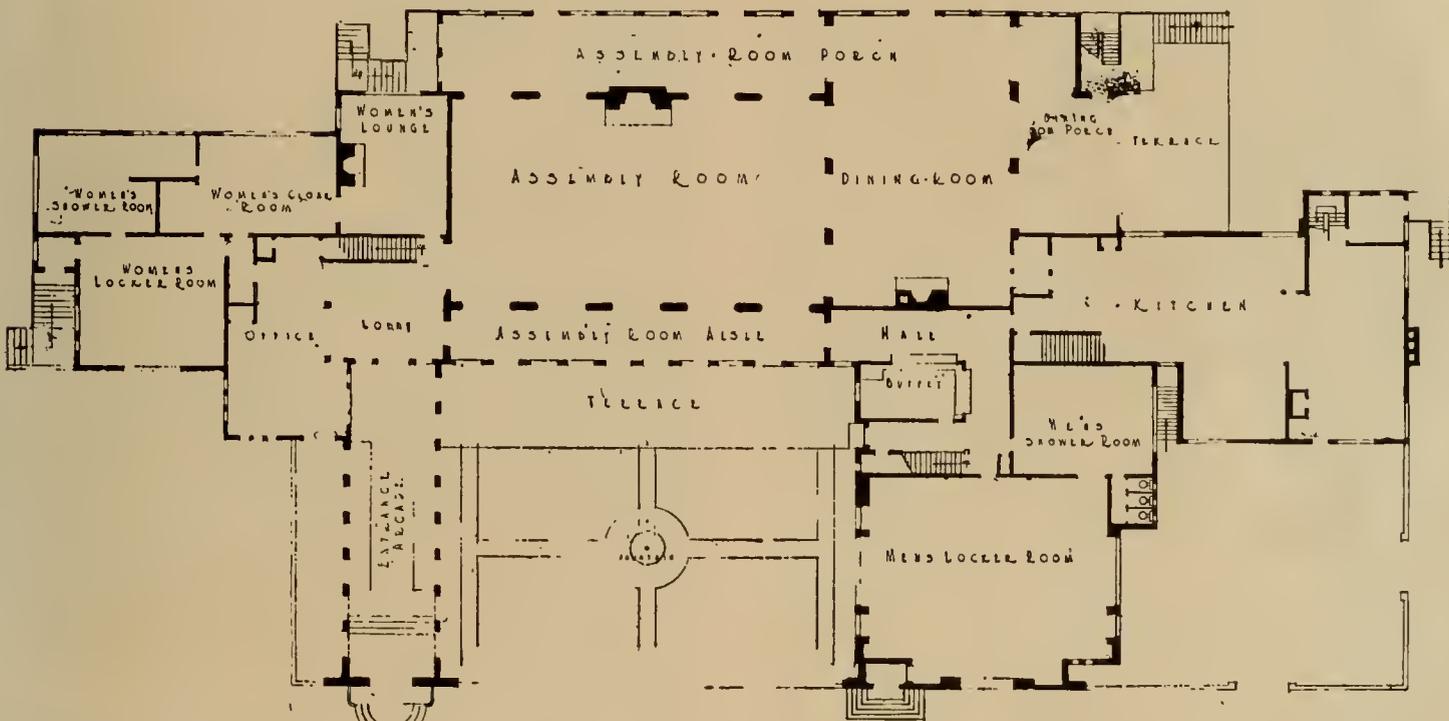
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THE BUILDING REVIEW



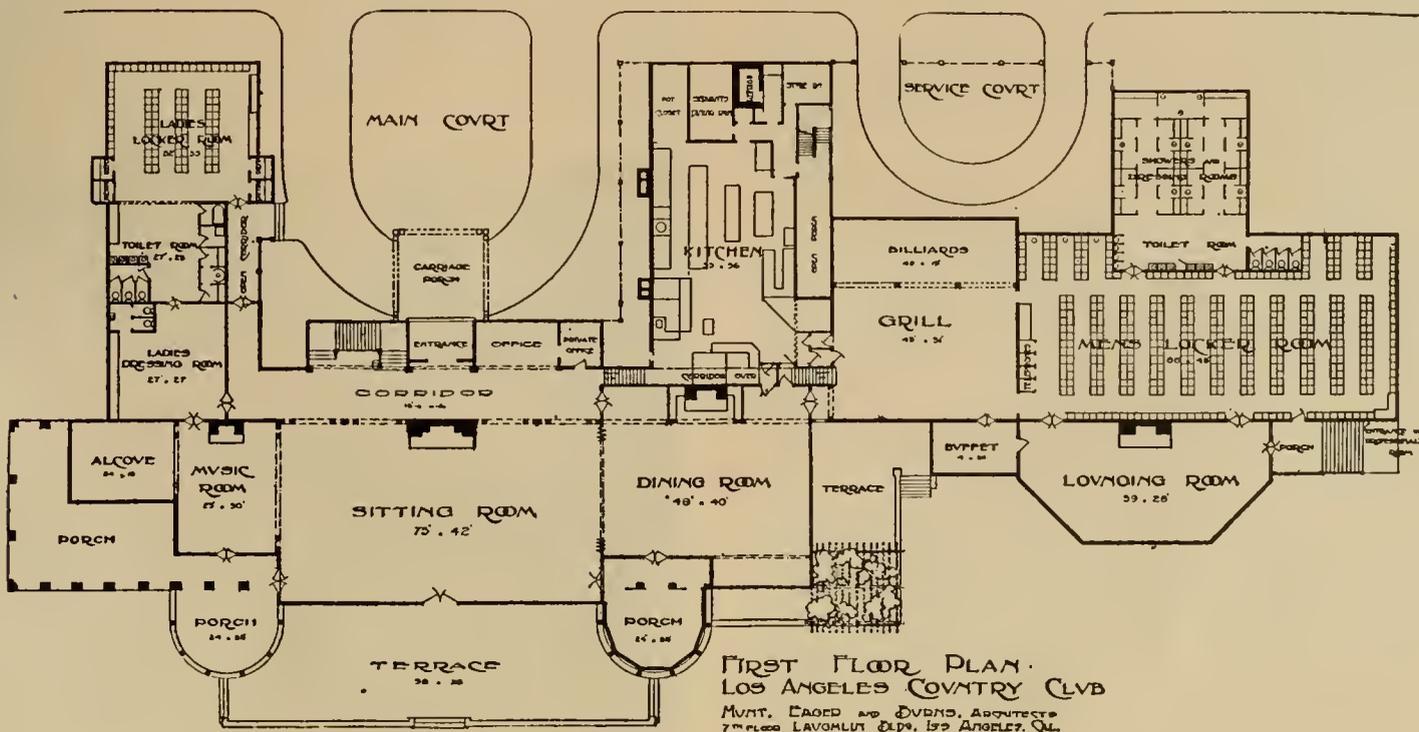
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ENTRANCE GATE
ESTATE OF CAPTAIN SPAULDING

(Continued from page 60)

gives promise of good results when the planting is grown. It is interesting to compare the sketches of this and the Southwest Museum with the photographs of executed buildings. These clean and brilliant drawings are the work of Mr. Ernest Irving Freese, to whose able technique in handling Hunt and Burns' office work much credit is due.

The Southwest Museum has been published and praised before, but mention should be made of the recent tunnel entrance, whose archaic composition suggests well, the character of the institution on the heights above.

The school work of this firm is by no means hackneyed; the Point Fermin School is especially interesting as adapting itself so gracefully and naturally to its uneven site. The Hollywood Y. M. C. A. gives promise of considerable interest when finished.

Captain Spalding's house was built some years ago, but large additions were recently made. The principal one of these consists of a music room about thirty by fifty feet in size, eighteen feet high. It is a remarkably beautiful room. In spite of its size, and splendor for the room, including the organ, represents easily a hundred thousand dollars—it is a distinctly comfortable room, with a mellow restful atmosphere that photographs can only dimly suggest.

The walls are paneled in oak of a soft brown tone; the panels, chamfered but not molded are graduated in size toward the ceiling, which is an extremely interesting treatment of beams with ornament both stenciled and in relief. The beams are painted light brown, the decoration in red and blue, with light red molded panels. This fine ceiling saves the room from any chance of being sombre, and in turn is saved from the charge

of ostentation by the height of the room, the closeness of the beams and the delicacy of detail.

An organ screen of wood occupies one end of the room, hand-carved, with the ornament picked out in dull gold; no two columns or balusters are alike. The sconces are gilt, and the chandeliers antique wrought iron. The floor is dark oak, laid in herringbone pattern with about two foot lengths, and of double width boards.

Splendid tapestries are hung on the walls, of a general dark blue tone, but containing much red. The hanging over the mantel is a marvelous brocade of red and gold, which makes a striking background for the lovely marble figure.

The new extension of hall, leading to the music room, is quite in keeping with the superb apartment to which it forms an antechamber. The natural outer stone wall of the original house was surfaced down and worked over until it attained a decidedly interesting texture and color, which was repeated for the new walls. The ceiling is of brown stained wood, rather roughly finished, with occasional grille-work panels connected with the echo organ. At one end, glass doors are covered with exquisitely hand-wrought iron, at the other is an oak door whose panels are carved by hand and effectively antiqued. Beside it a blue-green tapestry supplies a note of rich color. This hall is a gem in itself.

The gardens around the Spalding house are very lovely, and very extensive; the estate covers thirty-odd acres. There is an enticing pool, embraced by pergolas and sheltered by trees and rising ground. There are perhaps fifty of these estates scattered around this portion of Beverly Hills, and it is interesting to know that the landscape architect who laid out the district has achieved the triumph of



RESIDENCE OF S. R. BURNS
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making each owner believe his site is best of them all!

A glimpse of Mr. Burns' own house shows that when finished it will have an unassuming charm and a look of home-like comfort, besides a most convenient location on the edge of a golf course.

As Hunt and Burns have been recognized as authorities on club houses, we reprint from "California Southland" part of an interview with Mr. Hunt:

"In starting the Club House problem, the first consideration, of course, is the ground on which to build.

"Try to get a lot large enough to allow liberal extension. Women's clubs always grow and frequently find themselves where they either have to pay prohibitive prices for additional ground, or make extravagant changes in their general plans to give them the increased accommodations.

"On general principles, build the club house on one side of the lot, leaving the surplus largely on one side, rather than build the club house in the center of the lot, that is, unless the lot is unusually large.

"If possible, make the greatest length of your auditorium parallel to the front of the stage, rather than a long, deep room, running away from the stage and putting a considerable portion of the audience at an uncomfortable distance from the speaker.

"The ease of access to the speaker from any part of the auditorium makes for less disturbance of the audience by committee members or others who have to get to the stage during meetings, and promotes a social atmosphere.

"Get increased seating capacity for your auditorium in the form of gallery rather than increasing the ground floor area. This again for the same reason noted above, bringing the greatest number of people in closer proximity to the stage.

"For a typical club of 500 or 600 members it is advisable to have your dining room and kitchen on the same floor with the auditorium and the dining room, if possible, opening into the auditorium and the kitchen so located that it is practicable to serve direct to the auditorium as well as to the dining room, or at least near enough to the auditorium for efficient service, so that in case of large club luncheons or evening entertainments the auditorium can be used as a dining room.

"For a typical club having a membership as outlined above, the level floor auditorium is the only practical one, as the sloping floor

auditorium can be used for nothing but an auditorium.

"Remember that the service from kitchen to dining room or to auditorium when used as dining room, is apt to be handled by a considerable number of people, and be sure to provide room enough and doors enough for free circulation, thus avoiding congestion and resulting confusion and inefficiency.

"While it is advisable to have some dressing room accommodations accessible to the stage, the general cloak and dressing rooms should be off the entrance lobby rather than in the vicinity of the stage.

"For the small club it is advisable to make committee rooms thrown together with wide openings so they may serve as lecture rooms for audiences too large for one small room, and too small to be other than lost in the larger auditorium."

(Continued from Page 61)

ably remain on the bushes until January.

3. Disposition of the berries.—The berries may be disposed on the stems in various ways. They may be in large masses like *Cotoneaster frigida*, 50 to 200 in a cluster, with the berries well in sight and so compact and abundant that they look well even when the leaves drop. Give them a good background and you have a wonderful effect. Again, the branches may be in flat sprays like *Cotoneaster horizontalis* with the berries set close to the stem so that every berry is in sight. Then there is the type like *Cotoneaster acuminata* which carries few berries in a place but distributes them over a large portion of the branch. Such types bear near inspection but do not show off well when viewed at a distance.

BERRIED SHRUBS FOR MASS PLANTING.—Most of the berried shrubs do not look well in mass planting for the following reasons:

1. The shrubs do not lose their identity by mingling together as though they were one.

2. They are of the same height and form a monotonous sky line.

3. Their foliage is too small, sparse and far apart to make the best effect and the upper branches are too straggling and lack berries, since they berry on old wood. This cannot be remedied by pruning off the new shoots, at least in the *Pyracanthas*, because you thus cut off your next year's supply of berries.

POINTS DESIRED IN BERRIED SHRUBS.—1. Must not be eaten by birds. (Unless you grow them especially for the birds). Select those that are acid or distasteful to them.

2. Must be of good color, preferably white or red or some shade of red.

(Continued on Page XVI)

INDUSTRIAL

MANY NEW INDUSTRIES ATTRACTED TO LOS ANGELES

In line with the march of progress Westward and the expanding of Los Angeles industries now comes assurance of adding the title of "woolen centre" to the metropolis of the West. With the increase of garment, woolen, and other factories making worsted fabric, and the general magnetic call to Eastern manufacturers, there has been organized, through the initial researches and efforts of the Los Angeles Chamber of Commerce, the Pacific Southwest Wool and Warehouse Co., capitalized at \$1,000,000.

One unit of this is in operation at Wilmington and other units will be constructed at once. As stated by Francis H. Beckett, one of the directors of the company, "the organization of such a company in Los Angeles, will enable the wool producers of the West to ship their wool to the Port of Los Angeles and get a better price for it than they are getting in the East. We expect to build up a large trade with China and Japan". Beckett also pointed out that this company marks the first step toward locating here the worsted and woolen factories such as cluster around the wool centres of the Eastern seaboard.

So, marking this new organization as approximately the 491st concern established in Los Angeles this year, Los Angeles continues her trek to glory. That her progress is undiminished is shown by the building permits for October, which numbered 4,951, amounting in value to \$11,580,427. With October, the total value reached during the ten months of the year is \$100,995,480, which is \$18,234,094 more than the entire twelve months of 1921.

While we are dealing with figures we will cite the huge increase in bank clearings, the true barometer of conditions in Los Angeles. For the first 10 months of 1921 they reached a total of \$3,427,561,624. For the same period

of 1922, \$3,869,104,487, an increase of \$441,542,863.

There never has been such a demand for industrial sites as at present in Los Angeles, and as the growth of the manufacturing centre becomes greater, the attention of certain departments of the Chamber of Commerce is concentrating on the further improvement and enlargement of the harbor, which, even now, has reached a monumental stage. The municipal docks alone handled 820,883 tons of freight during the month of September, an increase over September of last year by 150 per cent.

Among the many activities and additions to the harbor was the recent permanent establishment of the direct ship line between Los Angeles and Honolulu, and the announced coming of a new direct ship line which will connect Los Angeles with Buenos Aires and Rio de Janeiro. Los Angeles harbor is destined, according to Admiral Benson, to be the greatest port in the world if the development plans of the citizens are carried out to the fullest extent. Real harbor improvement activity inspired almost wholly by the Los Angeles Chamber of Commerce did not begin until 1914 and then the world war and subsequent "confiscation" of the harbor by the government precluded further activity until 1920.

So, from an almost unused inlet of 1900, with development concentrated over a few short years, Los Angeles harbor handled, in 1921, over 4,860,000 tons of goods valued at \$209,999,847. It is interesting to compare this figure with that of the years' value of manufactured products, which reached \$800,926,641. As the so-called "back-country" must be highly active to maintain its cities, Los Angeles county plays up to its metropolitan county seat by leading all counties of the United States in value of crops and live-stock pro-

(Continued on Page 68)

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STOCKTON ANNOUNCES LARGE BUILDING PROGRAM

As the end of the most successful building year in the history of Stockton approaches, attention is directed to the prospects for 1923. Indications now point to another record breaking year and a tone of optimism prevails in the building industry.

Actual construction work on the new civic buildings, the \$600,000 auditorium and the \$600,000 city hall, has not started as soon as expected and it will probably be the first of the year before these structures are begun.

Plans have been completed for the new church of the Christ Scientists to cost approximately \$75,000. The new structure is to be carried out in the Grecian-Ionic type which has been used for many of the best Christian Science churches. An outstanding feature of

(Concluded on page XVI)

SAN FRANCISCO, FORWARD

San Francisco continues to ride upon the crest of an ever increasing wave of prosperity. Bank clearings, shipping records, building permits, post office receipts and real estate sales all show a strong bullish tendency upwards.

Bank clearings soared to a new pinnacle, reaching \$687,000,000 for the month of October. This is the highest figure in the history of the city, and is \$47,900,000 greater than the month of September. Already during the first ten months, check transactions recorded by the San Francisco Clearing House have totalled nearly \$6,000,000,000 and before the end of the year will pass the \$7,000,000,000 mark.

Enormous cargos daily are crossing the piers of the port and inbound and outbound carriers are being loaded to capacity. Shipping men report the activity unprecedented and wax optimistic about the future.

During October 556 ships passed through the Golden Gate, the highest mark in seven years. For the past five months of this year since March of this year there has been a steady increase of ship tonnage movement in the port.

The greatest gains which the city has made are shown in the fields of realty. During October 679 building permits were issued, calling for an expenditure of \$4,719,394, making this month the third largest the city has enjoyed. The total for 1922 to date, has passed the \$40,000,000 mark and by the end of the year it will be considerably more than double the 1921 total.

Building operations are evenly divided between frame structures and office and industrial buildings, showing that the increase in population is keeping pace with the rapid industrial development going on in the city.

1200 sales of San Francisco real estate were recorded during the month of October, representing a transfer of \$13,758,738. This is an increase of over \$4,000,000 over the figures for the previous month and passes the record for the same month of the previous years by a still wider margin. Again this activity is about evenly distributed between the industrial and residential areas, proving San Francisco's general forward advance.

Post Office receipts follow the general trend of business increase, climbing in October to the highest mark reached in the history of the San Francisco Post Office.

(Concluded on page XI)

The Home Beautiful

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The home of King Vidor, Motion Picture producer in Hollywood. A Lock-lath House.

(Continued from page 66)

ducts. The county's total field, truck, fruit, and nut crops reached a value of \$57,577,964 in 1921.

Visitors are so impressed with their actual visualization of industrial, cultural, and civic growth in Los Angeles that more of them are turning in their return tickets than ever before, which means their complete surrender and permanency of home at this terminus. To the report that the excise taxes collected from the manufacturers in Los Angeles for the year, reached \$1,289,095 (nearly \$300,000 more than in San Francisco) it is interesting to add the note that the Los Angeles district pays more Federal tax income per capita than any other section of the United States.

For the benefit of the Eastern, or other investor, the Los Angeles Realty Board is using every effort to prevent any inflation of site values, just as it is aiming to keep within reason city lot and acreage values. Strange to say, and fortunately, in spite of the tremendous activity, there is no speculation in industrial sites in Los Angeles. Great spaces convenient to electric power, inexhaustible water, ship

and rail facilities may be had at an approximately two cents per square foot.

Henry Riddiford, the lumber expert, says Los Angeles spends \$15.63 per capita per month for building. When this figure is compared with the \$6.80 per capita for New York and \$3.80 per capita for Chicago one realizes the extent of the huge building activity in Los Angeles. This lumber expert declares that there is more lumber and other forest products received at the Port of Los Angeles than there is at any other port in the United States. If the lumber received at this port during 1921 was converted into one by twelve boards, it would be sufficient to erect a fence twelve feet high, 10,000 miles long.

The home section of the city, stretching far westward, is protected geographically from odors or smoke arising from the industrial district. The winds blowing in from the sea float steadily over the industrial zone East of the city. Smoke, however, is practically eliminated from the factories as electric power is so abundant and cheap that the bulk of machinery, including iron-ore furnaces, is run by this cleanly and economical power.

(Concluded on page XIV)

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MONTHLY BULLETIN

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DIRECTORS

Wm. Mooser, three years.
J. H. Blohme, three years.
A. J. Evers, two years.
Harris Allen, two years.
S. Schnaittacher, one year.
Morris M. Bruce, one year.

NEXT MEETING

The next meeting will be held on Thursday evening, December 21, 1922, at the Architectural Club Rooms, 77 O'Farrell Street at 6:30 P. M., and will be preceded by a Directors meeting at 5:30 P. M.

On account of the nearness of Christmas the meeting will be a joyous one and the Board of Directors will endeavor to furnish an interesting time to all.

NOVEMBER MEETING

The November meeting was very interesting and if those present learned nothing more than to tell a good shingle from a bad shingle, they were repaid for coming. Mr. H. S. Stromach's talk on wood was highly interesting and for the coming year it is the intention of the present administration to cut the routine business and have someone present to talk on subjects interesting to the profession. We would welcome any suggestion from members along this line.

The Directors and Regular meeting of the San Francisco Chapter of the A. I. A. was held Thursday evening November 16, 1922, in the Architectural Club rooms, 77 O'Farrell Street. The meeting was called to order by the President, Mr. Geo. W. Kelham. The following members were present:

Harris Allen, J. Harry Blohme, Edw. G. Bolles, J. W. Dolliver, E. B. Hurt, H. H. Myers, K. MacDonald, John E. Norberg, W. J. Wilkinson, J. S. Fairweather, Morris M. Bruce, Earle B. Bertz, E. E. Coxhead, Albert Evers, Geo. W. Kelham, Wm. Mooser, Chester Miller, S. Schnaittacher, Stanton Willard.

A few guests were also present.

Minutes

The minutes of the October meeting were read and approved.

New Business

It was moved and unanimously carried that the present sum of \$33.69 that the Chapter has in the Savings Bank, be added to by the sum of \$206.57 and that this sum be made the nucleus of an Educational Fund, and that all members add to this fund by subscription and also induce such clients as are interested in Art to help the fund grow.

The Executive committee to draft some way of safeguarding the fund and submit same to Chapter for approval.

Mr. Harris Allen presented to the Architectural Club a book of Architectural Drawings by Wooster Bard Field for which the Chapter gave him a vote of thanks.

It was moved and carried that Mr. Allen prepare a circular of Informative Publicity and get an estimate of cost of same.

The president was instructed to write another letter to the War Memorial Committee to see what steps are being taken toward San Francisco's Memorial building.

Communications

A letter from Wm. George of the Builders Exchange read and ordered answered by the President.

A letter from the Southern California Chapter in regard to Jurisdictional Awards read and placed on file.

A letter from E. C. Kemper regarding Geo. H. Howard's admission to Institute membership received and placed on file.

A letter received from E. C. Kemper in regard to further rebate received and placed on file.

New Rulings

The Department of Electricity have gotten out a new

book of rulings of the department which can be had free by applying at Room 205, City Hall, San Francisco.

Adjournment

There being no further business before the Chapter the meeting adjourned.

J. S. Fairweather, Secretary.

November 17, 1922.

Mr. W. H. George, President,
The Builders' Exchange,
180 Jessie Street,
San Francisco, Calif.

Dear Mr. George:

Replying to your letter of November 8th, as to a more definite statement in Architectural Specifications regarding the American Plan:

The matter was brought before the meeting of our Chapter last night, and we again urged our members to keep their work as closely as possible within the lines of the Industrial Association, although we can, as you of course know, go no further than to suggest and request to our members in such a matter; each individual being free to take such action as he sees fit.

We intend further to again call the attention of our entire membership by letter, to the fact that we are, and always have been, in sympathy with the aims of the Industrial Association.

In the final analysis you must not forget that the question of how any particular piece of work shall be carried out rests with the owner.

When you, as you say, "run across" a set of specifications calling for Union Conditions, and will notify us of the fact, we will try and take up the matter.

Very truly yours,
Geo. W. Kelham,
President.

LIST OF MEMBERS OF THE SAN FRANCISCO CHAPTER, A. I. A.

Allen, Harris, C., Central Bank Bldg., Oakland.
Applegarth, Geo. A., Claus Spreckels Bldg., S. F.
Bakewell, John, 251 Kearny Street, S. F.
Barth, Hermann, Phelan Building, San Francisco.
Baur, John A., 251 Kearny Street, S. F.
Binder, William, 257 So. First St., San Jose.
Bertz, Earle B., 68 Post St., San Francisco.
Bliss, W. D., 1001 Balboa Building, San Francisco.
Blohme, J. Harry, 454 California St., San Francisco.
Bolles, Edward G., 233 Post Street, San Francisco.
Brown, Arthur, 251 Kearny Street, San Francisco.
Bruce, Morris M., 859 Flood Building, San Francisco.
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Cannon, Edward W., Central Bank Bldg., Oakland.
Cantin, A. A. 68 Post Street, San Francisco.
Caldwell, Albert M., 251 Kearny St., San Francisco.
Cole, Chester, Waterland-Breslauer Bldg., Chico.
Corlett, Will G., Oakland Savings Bank Bldg., Oakland.
Coxhead, E. A., Hearst Building, San Francisco.
Clark, Arthur B., 4 Cabrillo Street, Palo Alto.
Crim, W. H. Jr., 425 Kearny Street, San Francisco.
Delongchamps, Fred J., 336 Gazette Bldg., Reno, Nev.
Devlin, Leo. J., Pacific Bldg., San Francisco.
Dickey, Chas. W., City Hall, Oakland.
Dolliver, J. W., 114 Sansome Street, San Francisco.

Donovan, John J., Pacific Building, Oakland.
 Ehrenpfort, Arthur T., Russ Bldg., San Francisco.
 Emory, Walter L., 942 Fort St., Honolulu.
 Evers, Albert J., Holbrook Bldg., San Francisco.
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 Faville, W. B., 1001 Balboa Bldg., San Francisco.
 Falch, Walter C., Hearst Bldg., San Francisco.
 Ferris, Geo. A., Box 363, Reno, Nevada.
 Fairweather, J. S., 1001 Balboa Bldg., San Francisco.
 Glass, Edward, Hearst Bldg., San Francisco.
 Georgeson, F. T., Humboldt Nat. Bk. Bldg., Eureka, Cal.
 Hayne, B. S., 604 Balboa Bldg., San Francisco.
 Hatch, John D., 424 Foxcroft Bldg., San Francisco.
 Hays, Wm. C., 1st Nat Bank Bldg., San Francisco.
 Headman, August G., Call Bldg., San Francisco.
 Hemmings, E. C., 1203 I St., Sacramento.
 Herold, P. J., Forum Bldg., Sacramento.
 Herold, R. A., Forum Bldg., Sacramento.
 Hobart, Lewis P., Crocker Bldg., San Francisco.
 Howard, John Galen, 1st Nat. Bank Bldg., S. F.
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 Hilderbrand, E. H., 110 Sutter St., San Francisco.
 Hyman, Samuel L., 68 Post St., San Francisco.
 Hurt, E. B., 521 Cottage St., Oakland.
 Howard, Geo. H., 35 Montgomery St., San Francisco.
 Jacobs, Alfred H., 110 Sutter St., San Francisco.
 Joseph, B. J., Call Bldg., San Francisco.
 Johnson, A. R., 742 Market St., San Francisco.
 Kelham, Geo. W., Sharon Bldg., San Francisco.
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 Krafft, E. J., Phelan Bldg., San Francisco.
 Lake, H. E., Balboa Bldg., San Francisco.
 Lansburgh, G. A., 709 Mission St., San Francisco.
 Lenzen, T. W., Humboldt Bank Bldg., San Francisco.
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 Meyers, Henry H., Kohl Bldg., San Francisco.
 Miller, C. H., 414 13th St., Oakland.
 MacDonald, Kenneth, 234 Pine St., San Francisco.
 Miller, James R., Lick Bldg., San Francisco.
 Morgan, Julia Miss, 1135 Merchants Ex., S. F.
 Mayo, Frank V., 207 Yosemite Bldg., Stockton.
 Molera, E. J. (Hon.) 2025 Sacramento St., S. F.
 Mooser, Wm., Nevada Bank Bldg., San Francisco.
 Mullgardt, L. C., Honolulu, H. T.
 Maybeck, Bernard R. (Hon.) Lick Bldg., San Francisco.
 Newman, Wm. A., 402 P. O. Bldg., San Francisco.
 Narbett, Jas. T., 906 MacDonald Ave., Richmond.
 Newsom, Sidney B., Nevada Bank Bldg., S. F.
 Newsome, Noble, Nevada Bank Bldg., San Francisco.
 Nicholson, A. D., Chronicle Bldg., San Francisco.
 Norberg, Ernest L., 604 Balboa Bldg., San Francisco.
 Norberg, John E., 604 Balboa Bldg., San Francisco.
 O'Brien, Matthew, 68 Post St., San Francisco.
 O'Brien, Smith, 742 Market St., San Francisco.
 Page, Geo. W., Santa Clara R-A, Box 14.
 Parker, Walter H., 57 Post St., San Francisco.
 Politeo, M. V., 1st Nat. Bk. Bldg., San Francisco.
 Plachek, James W., 2014 Shattuck Ave., Berkeley.
 Perry, Chas. E., 514 Martin St., Vallejo.
 Ratcliff, W. H., 1st Nat. Bk. Bldg., Berkeley.
 Reed, Walter D., Oakland Sav. Bk. Bldg., Oakland.
 Reid, James W., Cal.-Pacific Bldg., San Francisco.
 Reid, M. J., Cal.-Pacific Bldg., San Francisco.
 Reid, John, 1st Nat. Bank Bldg., San Francisco.
 Righetti, Perseo, 12 Geary Street, San Francisco.
 Ross, T. Patterson, 310 California St., San Francisco.
 Rushroth, Geo. 354 Pine St., San Francisco.
 Ray, Russel, 1530 Chapala St., Santa Barbara.
 Sawyer, Houghton, Shreve Bldg., San Francisco.
 Schmidt, Herbert, 45 Kearny St., San Francisco.
 Schroepfer, Albert, Nevada Bank Bldg., San Francisco.
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 Schultz, Henry A. (Hon.) 1018 E. 17th St., Oakland.
 Shea, Will D., 244 Kearny St., San Francisco.
 Sheldon, Martin A., 110 Sutter Street, San Francisco.
 Smith, Thomas, 67 Elgin Park, San Francisco.
 Simpson, Horace G., Call Bldg., San Francisco.
 Skillings, Warren, Garden City Bk. Bldg., San Jose.

Scholz, Arthur G., Phelan Bldg., San Francisco.
 Steilberg, Walter T., 908 Flatiron Bldg., San Francisco.
 Symmes, Edwin J., 1700 Pearl St., Alameda.
 Traphagen, O. G., 244 California St., San Francisco.
 Traver, Harrison B., 626 Rowell Bldg., Fresno, Calif.
 Thomas, John H., 1st Nat. Bk., Bldg., Berkeley.
 Upton, Louis M., 454 Montgomery St., San Francisco.
 Voorhees, Fred D., Central Bank Bldg., Oakland.
 Ward, Clarence R., 454 California St., San Francisco.
 Weeks, Chas. Peter, California Ins., Bldg., S. F.
 Willard, S. D., 715 First Ave., San Mateo.
 Wood, Hart, Castel & Cooke Bldg., Honolulu.
 Wythe, W. J., Central Bank Bldg., Oakland.
 Webb, Marshall H., James Campbell Bldg., Honolulu.
 Wilkinson, W. J., 220 Howard Ave., Piedmont.
 Yelland, W. R., 414 13th St., Oakland.

ANNOUNCEMENT

Mr. John J. Donovan, Architect, Member of the American Institute of Architects, School Building Specialist and author of "School Architecture" announces that Dr. Frank W. Hart, Associate Professor of Educational Administration and Mr. L. H. Peterson, Associate in Educational Administration of the Department of Education, University of California are now associated with him for the purpose of providing an enlarged and improved consulting service to School Boards and Architects by closely combining the architect's training and experience with the professional school administrator's knowledge of the modern educational demands upon the school plant.

This combined service has long been desired by Boards of Education and Architects in order that the architecture and planning of the executed work will economically and effectively meet the educational requirements of the school.

The enlarged service contemplates preparation of building surveys and schoolhousing programs in connection with school planning for communities confronted with the problem of increasing their building facilities.

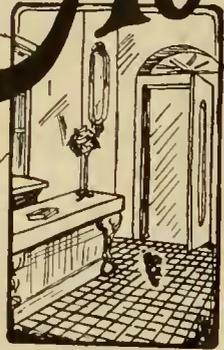
Offices have been established at 512 Pacific Building, Oakland, California.

(Concluded from page 67)

Students of economic thought, point out that this general industrial development is due only to those powerful latent forces of economic resources that have long lain dormant in San Francisco and which are now only beginning to be realized and to be exploited by local residents and outside capital. Efficient rail and water transportation, proximity of raw materials, cheap power, the exact centre of the Pacific Coast population and a climate uniformly cool and invigorating are all factors which guarantee San Francisco's continued position as the metropolis of the West.

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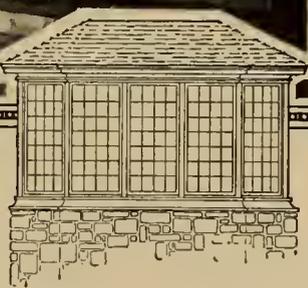
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Review of Trade Literature

ASBESTOS BUILDING LUMBER

Asbestos Shingle, Slate & Sheathing Co., Ambler, Penna.
Catalog A. B. L., 1917. 32 pp. Illustrated. Compiled for the Architect and Builder showing the many uses of Asbestos Building Lumber, its beauty, economy, permanency and general utility.

BATH ROOM FIXTURES

Pacific Sanitary Manufacturing Co., 67 New Montgomery St., San Francisco.
Catalog. 100pp. Illustrated. Covers the work of Architect, Contractor and Plumber in the choice and installation of modern sanitary bath room fixtures.

CEMENT

Portland Cement Assn., 111 West Washington St., Chicago, Ill.
Catalog 8½x11. 16pp. Illustrated. Especially prepared for Architects and Builders. Instructions for application.

DRINKING FAUCETS AND FOUNTAINS

Haws Sanitary Drinking Fountain Co., 1808 Harmon St., Berkeley, California.
Catalog containing 40 illustrations showing various types of sanitary drinking fixtures. Special attention is given to the problem of drinking arrangements in schools and other public places.

ELECTRICAL EQUIPMENT

Macbeth-Evans Glass Company, Pittsburgh, Penna.
Catalog. 3½x6½. 4p. Illustrated. Indirect and semi-indirect lighting units.

FIREPLACES AND MANTLES

Batchelder-Wilson Co., Los Angeles, California.
Illustrated catalog in color showing large variety of mantle and fireplace designs.

FLOORING

Insulite Chemical Company, 373 Monadnock Building, San Francisco, California.
Catalog. 8½x11. Illustrated. The story of Insulite. Its application, lasting qualities. List of 48 school buildings where recent installations have been made.

Stedman Products Company, South Braintree, Mass.

Catalog. 8½x11. 4pp. Illustrated in colors. Shows the many varieties of Stedman Naturalized Flooring, several photos of installations, and its various uses.

FURNITURE

Reinhart Lumber & Planing Mill, 17th and Arkansas St., San Francisco, California.

Catalog 5½x6½. 14pp. Illustrated. Covers many types of built in fixtures as ironing boards, drop tables, breakfast nooks, telephone cabinets, etc.

American Walnut Mfgs. Association, 618 S. Michigan Boulevard, Chicago, Illinois.

Catalog. 8½x11. 4pp. Illustrated. How to judge walnut and a classification of walnut furniture.

HEATING EQUIPMENT

Hoyt Heater Company, 2838 E. Second St., Los Angeles, Cal.
Catalog. 3½x6½. 12pp. Illustrated. Detailed description showing advantages of the instantaneous water heater.

PILES AND TIMBERS

Century Wood Preserving Company, Century Building, Pittsburgh, Penna.

Catalog. 24pp. Illustrated. Covers Wood Preservation, Process used in Timber Treatment, Preparation of Wood Block Floors, Pavements, etc.

RADIUM

United States Radlum Corp., 58 Pine Street, New York, N. Y.
Catalog. Loose Leaf. 8½x11. Illustrated in colors. The application of Radium to the home, public buildings, etc., on pull socket chain pendants, switches, call bell pushes, etc., enabling them to be located readily in a dark room.

WATER HEATERS (See "Heaters")

CIVIL SERVICE EXAMINATION FOR ARCHITECTURAL DRAFTSMAN

The United States Civil Service Commission announces an open competitive examination for architectural draftsman to be held on December 6th and 7th, 1922. A vacancy in the office of the Supervising Architect, Treasury Department at \$1,600 a year (plus bonus) and a vacancy in the central office of the Veteran's Bureau at \$2,000 a year (no bonus) and vacancies in positions requiring similar qualifications, at these or higher or lower salaries, will be filled from this examination, unless it is found in the interest of the service to fill any vacancy by reinstatement, transfer or promotion. Further information may be obtained from the Building Review or by writing to the United States Civil Service Commission, Washington, D. C.

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(Concluded from page 68)

The type of small home architecture running into a sort of fad among builders is after the Spanish and the hills are dotted with these apparently "roofless" bungalows and chalets. The idea being considered so in harmony with tradition and romance in California, many very large homes are of Spanish design or influence. The so-called double-bungalow seems to be giving way to the duplex, which gives two flats under one roof with greater ground space and light on all four sides. In many cases, owing to the many picturesque hill-sites, such structures are erected with the garages built into spaces dug out from the hill side. One enterprising builder in Los Angeles is featuring a "temporary" structure of two stories, with the garage in the lower front corner. This he says has met with ready patronage owing to so many wanting to buy and hold a lot until they can erect their bungalow or flats in front. He offers this type for approximately \$2,900. This includes living room, breakfast nook, kitchen, and garage on first floor, and two bedrooms and bath on the second. This is the "California-house" type of course.

Brick is again coming into its own in Los Angeles and many small dwellings are now constructed of the convenient clay slabs. Man-

ufacturers in Los Angeles state that the output of common brick has reached over 15,000,000 per month, which would build a wall five feet high and forty miles long. The huge clay deposits adjacent to the city are responsible for the rapid output of this brick. In the structures where concrete plays its part, demands are made on one firm alone for 165 carloads of rock daily.

Figures are becoming so large and the computation so complicated that from where records could be easily obtained from the newspapers, now all the leading banks, chamber of commerce, and other institutions have installed complete research departments. Some of the banks have gone beyond their own direct needs and cover all details of industry and crop production as well as mining, electric and hydraulic power, oil, and imports and exports.

GLASS THAT WILL NOT BREAK

A glass that can be heated and then cooled rapidly without danger of breaking has been put on the market in Belgium. Kitchen utensils and chemical apparatus can be made from this glass without any difficulty. The only difference between this product and the common glass is that boric acid is used in place of sand.—From The Industrial Digest.

ADVANTAGES OF STEEL CASEMENT WINDOWS

That the popularity of steel casement windows will increase among home builders, as did the use of steel sash among industrial builders, is unquestioned. Ten years ago, steel sash was practically unknown among the building trade. Today, it is used in factory buildings, stores, office buildings, schools, banks and even hotels. This increased use of steel sash has been brought about by educating building owners, architects and contractors to its many advantages. In like manner, the home owner, contractor and architect will come to look upon steel casement windows with favor and satisfaction.

Steel casement windows have several important advantages over wood windows that are sure to appeal to the thoughtful home owner and builder.

They admit from 40 per cent to 80 per cent more daylight for the same sized masonry opening. The sash and frame are made from solid, narrow, rolled steel bars, eliminating the wide wooden members and permit the use of larger glass lights.

Steel windows cannot stick or warp. The difficulty experienced by every home owner in trying to open or close his windows, when the sash has swollen and stuck, is entirely eliminated. Steel is not affected by moisture.

Screens may be attached easily to the outside of the frames. Holes are punched through the frame so that special screen frames are unnecessary.

Because of their construction, steel windows resist fire and stand up under usage. They always have a better appearance than wooden windows, and add to the attractiveness of a house.

Here is one fact of interest to contractors and builders. Steel windows with channel frame construction save labor and expense in installing. This type of window will set upright on the sill without bracing and it has the important additional advantage of serving as a guide to the mason. The channel frame makes it impossible to build the wall so close that it will bind the ventilator. The outside leg of the channel frame is somewhat longer than the inside leg. The mason builds the wall snugly against the front leg filling the channel with mortar as he goes up. Anchorage is secured by means of four straight flat pieces of steel about one inch by four inches long.

(Concluded on page XVII)

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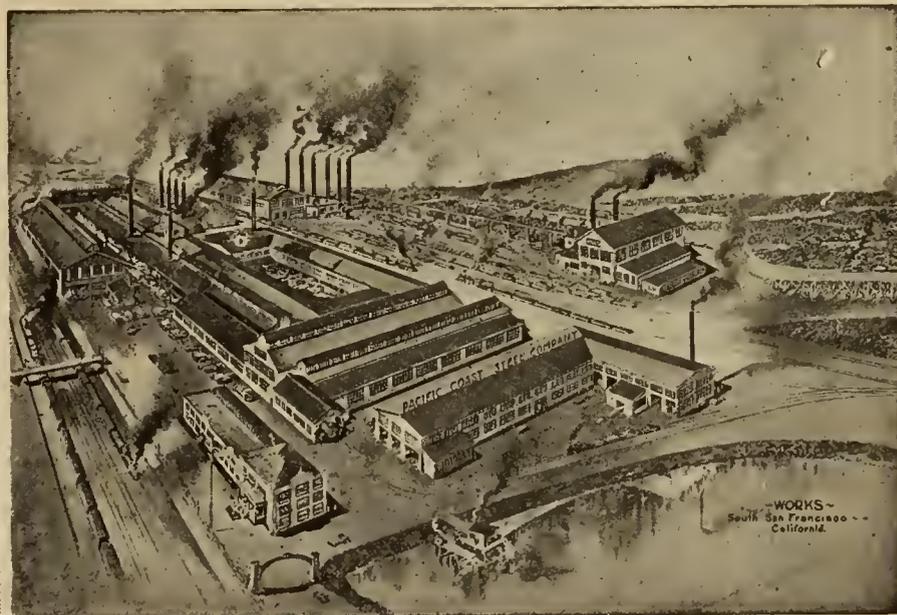
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Indiana World War Memorial

Notice to Architects

NOT later than March 15, 1923, the Board of Trustees of the *Indiana World War Memorial* will receive at its offices in The Chalfant, N. W. Corner of Pennsylvania and Michigan Sts., in the city of Indianapolis, Indiana, competitive "designs, plans and specifications" for a World War Memorial to be erected in the city of Indianapolis at an approximate cost of \$2,000,000.00.

Full information in regard to the competition may be had by addressing

PAUL COMSTOCK, *Secretary*

The Chalfant,
INDIANAPOLIS, INDIANA

(This competition is approved by the Standing Committee on Competitions A. I. A., and is to be held in accordance with A. I. A. principles.)

(Concluded from Page 67)

the structure will be a handsome portico of Ionic columns. Construction will start shortly before the first of the year.

Although it has not been definitely decided when the erection of the College of the Pacific buildings will be started, the ground plans are now ready and the landscape work on the campus will begin in the spring.

Work has already started on converting the building formerly used as the Hippodrome theatre on Sutter street into a business and office building. Plans call for making 22 offices on the second floor and two stores on the ground floor, one to be occupied by the Ernest L. Wilson Candy Company. Aside from the cost of remodeling the building, this company will expend about \$75,000 in fixtures and fittings peculiar to its business.

Work will be started immediately by the California Auto Supply Company on a new store building. The estimated cost of the building is \$15,000.

The \$35,000 store building of Louis Jacobs on Market Street near Grant and the \$50,000 store building of J. C. Black on Weber Ave., between California and American streets are rapidly nearing completion.

MOTION PICTURES HELP HOME BUILDING

Motion Pictures are being made use of in the promotion of practically every form of activity. Therefore, their use in promoting home building is no more than logical. Much interest has been aroused in various parts of the country by the erection of "model houses," suitably furnished; the theory being that anyone seeing such a model would be very apt to become a home owner. Just how successful this method has been is very doubtful. It is certain, however, that whatever has been accomplished has been quite limited in scope owing to the fact that the expense involved for erecting "model houses" is quite prohibitive if undertaken as a national movement, since the appeal at best has been purely local. Some more universal means of appeal would seem to be necessary—what more logical method than the Motion Picture? The demand which has been found to exist for a national means of encouraging home building has resulted in the creation of a five-reel film which will show the actual erection of a modern six room brick Colonial house, together with its equipping and furnishing, the final scenes showing the happy and contented family. To make the presentation as interesting as possible, an unusually attractive suburban plot has been selected. It may be safely assumed that the production will do ample justice to the subject matter inasmuch as it is being done with the full co-operation of many organizations associated with the progress of building. The counsel of experts has been sought and their suggestions followed as far as practicable.

(Continued from Page 65)

3. The berries must be reasonably persistent.
4. They must be borne in sight and not half hidden.
5. They should be preferably evergreen unless the beauty of the berry offsets the leafless twig.

WHERE BERRIED SHRUBS MAY BE USED.—

1. Along paths and driveways.
2. As individual specimens.
3. In rockeries. (Cotoneaster horizontalis and C. microphylla fine for this.)
4. In shrubbery mass. Very few are adapted to mass planting but Cotoneaster nanosa in rear with Cotoneaster franchetti in front are particularly good.
5. As cut plants for decoration.
6. As pot plants.

(Concluded Next Month)

(Concluded From Page XV)

These are laid in the mortar joints in such a way that the ends extend about one-half inch into the channel at the jambs.

One advantage of steel casement windows, which appeals to architects, contractors and dealers, alike is the fact that they are standardized and made in only a few popular sizes. This assures the architect or contractor that he will not have the delay, the extra cost and trouble which invariably accompany the purchases and installation of special sized wood windows and also permits the dealer to carry a sufficient stock with only a small investment, and sell at a price commensurate with wood.

Another point in favor of using steel casement windows is that of low initial cost both to the home owner and building supply dealer. Not only are they quoted at a price that successfully competes with wooden windows, but an additional saving is also effected, by the fact that these steel windows are completely equipped, sash hung, priming coat of paint applied, and all hardware in place.

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When you do this, you help in the fight against tuberculosis. You help save human lives. Your help goes where help is most needed—to the house that is clouded with the threat of death. When the seals come, buy them.

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The result is that a great amount of energy is being spent on trying to get a lion's share of the existing demand, and not enough is spent on trying to create the demand so there will be enough to keep everybody busy supplying it.

This brings about a period of keen competition. It means that everybody must work harder and accept less in order to overcome the sales resistance of a curtailed demand.

Demand is largely a created thing. The actual needs of humanity are only a fraction of the general demand. It is always a simple

matter to get along with less than one would like to have. When the public gets a streak of economy it curtails the demand for everything that is produced.

Advertising is a prime mover in creating business. It rouses people out of lethargy, makes them want to live more fully, and to possess the means of living more comfortably and more enjoyable.

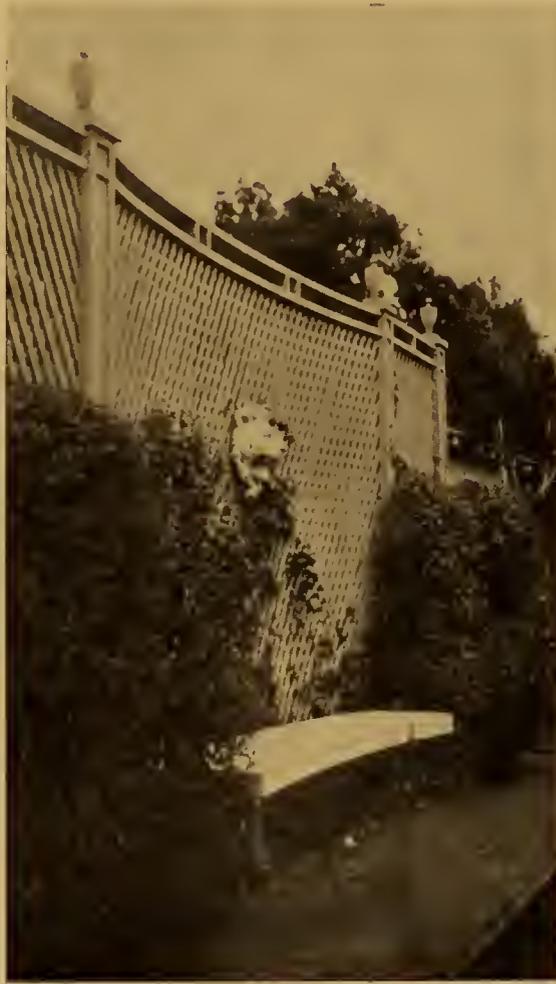
When sales are hard to get, then most people who have things for sale increase their efforts to sell. The harder they try to sell, the harder their competitors try to sell. But no amount of selling effort—in the usual sense of the word—can create demand; it can only take advantage of the demand that has been otherwise created.

Advertising and Selling ought to be considered as "fifty-fifty" in importance. Advertising creates the consumer demand. Selling connects this demand with the supply. Each needs the other to make its work complete.

(Published by *The Building Review* in co-operation
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THE
BUILDING
REVIEW



DECEMBER, 1922

Vol. XXII

No. 6

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THE BUILDING REVIEW

VOL. XXII

DECEMBER, 1922

No. 6

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The editors will be pleased to consider contributions of interest to the Industry. When payment of same is desired, this fact should be stated.

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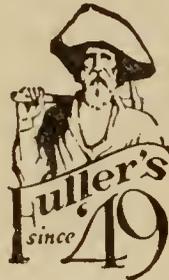
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The BUILDING REVIEW

VOL. XXII

SAN FRANCISCO, DECEMBER, 1922

No. 6



RESIDENCE OF MR. W. E. THOMAS

W. E. CANNON, ARCHITECT

SHEPARD CANYON ROAD, OAKLAND, CALIF.

The Studio Home

"Anything is worth only what you are willing to put it in terms of life"—Thoreau.

MARY ROBINSON THOMAS

Throughout the land more houses are needed! The demand for small houses which are comfortable and charming far exceeds the supply! This is true in every state, city and town in America!

The Studio Home helps to solve this housing problem in a simple, attractive, and economical way. It adapts itself to any in-

come, it gives to the individual the environment of a home which requires little time and energy in its care. At first the studio home was associated with the artist alone, but now, any individual with original and artistic ideas may create "a thing of beauty which is a joy forever." This type of house attracts the kinds of people who have out-



RESIDENCE ON CANYON ROAD
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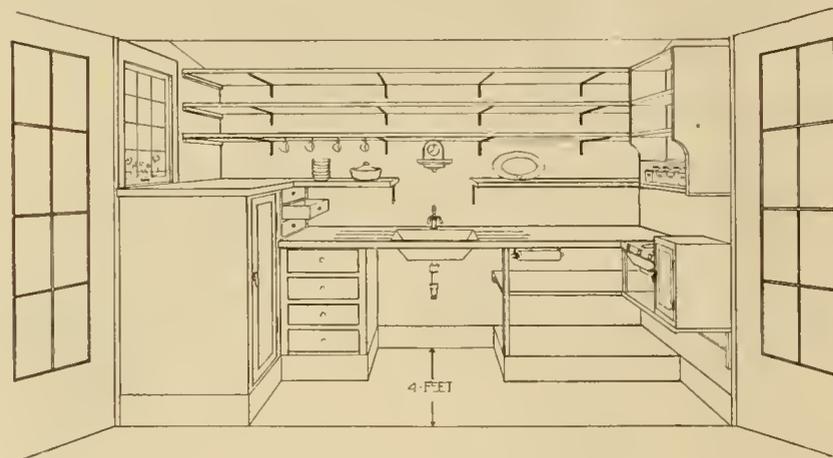
grown the family home, and feel the need of expressing themselves in an independent way. It attracts those who suffocate in hotels, boarding houses and apartments, and who starve unless surrounded by true and wonderful nature, who choke in the valleys, and struggle for the heights!

This type of house appeals particularly to the persons who is occupied in doing things worth while in the world, and therefore has little time and energy left, and still less inclination, for the stereotyped mode of house-keeping and a treadmill existence. Artists, authors, musicians, sculptors, professional and business men and women are all patrons of these attractive homes. Probably the first artist in the Latin Quarter of Paris, who made an attic a liveable place, was thought to be decidedly "queer," to express it mildly. The studio home has been evolved from just such a lowly origin. Now its chief distinction is, that, instead of being under the same roof with many others, it has its separate roof, garden, and usually, an exceptionally fine outlook. Some of the most charming of such homes are those which show all the construction work and really

resemble an attic lowered to the ground floor. The studio home has no special period of architecture. It generally represents any type which particularly appeals to its future owner, that is, which fits in to the owner's needs and becomes a picturesque feature in the landscape. The Swiss Chalet, the Japanese and the Berton cottage-types are the favorites; probably because they have extremely artistic lines and unusual features.

Any one soon realizes what an inert old world this is, if he tries to carry out original ideas in building a home. The contractor, the sub-contractor, workmen, and most of one's friends, relatives and neighbors are banded together, first to discourage, then to argue, then to ridicule, and finally to implore the omission of all original ideas. But, in spite of all this opposition one can achieve independence and charming individualism in a home. This fact above all else justifies its creation. In other words, the studio home supplies the needs of people who cannot be at their best or do their best if surrounded by an ordinary or sordid environment. To such people environment is a real inspiration! An exceptionally beautiful vista of hills or valleys, a river or an ocean from a particular window, just the right harmonizing colors in the room, an exquisite vase or bowl, and even the immaculate bit of linen on the tea-tray, give to their possessor a sense of the ideal.

It is often objected that the beautiful is expensive and beyond the purse of any but the rich. The examples of studio homes, which are shown in the illustrations are most artistic as to building and setting, and yet in



PORTFOLIO KITCHEN

(Concluded on Page XVIII)



GROUP OF SMALL HOUSES

HAROLD STONER, ARCHITECT

A Well-Designed Group of Small Houses

BY CLARA FASSETT

A group of three houses at Ingleside Terrace in San Francisco, planned so as to face a common lawn, but with entirely separate rear gardens, has aroused no small amount of interest among builders and home-owners of this region.

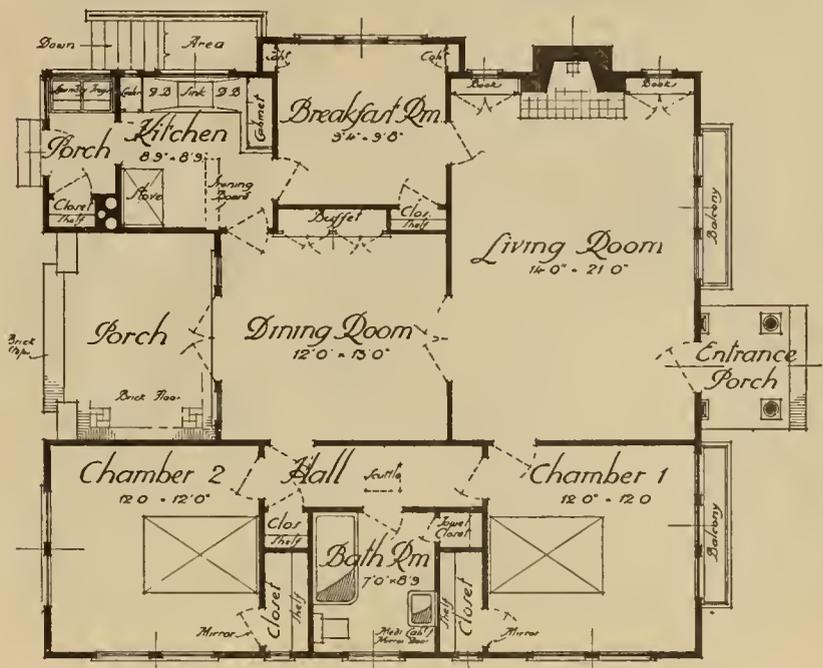
A mere house, after all, is not in itself a home—there must be a yard or garden for the children to play in—some trees, shrubs and flowers and a bit of lawn or terrace, else why bother to go out of town! Fresh air in a city like San Francisco is abundant everywhere, and when one has decided to build, sacrificing apartment-house conveniences and the three-minute walk to business to a thirty-minute trip night and morning, he feels that he is entitled to a few feet of earth to play upon, and decidedly objects to being crowded on a narrow lot with the next door neighbor within hand-shaking distance.

While it is necessary owing to increasing cost of property to economize on frontage and to conserve space as much as possible, and while all the average little-home owner wants in the rear is room for a garage, a dog-house, a few flowers and vegetables, yet he would like a moderate amount of elbow room at the sides and some green grass to gaze upon in front—

not too much—remembering said grass must be mowed and watered.

The three lots comprising this plot are fifty by one hundred feet each and terraced to the street level. The central house is set back about one hundred feet from the street, while the others facing each other present an interesting side-view with southwestern exposure.

The middle house of Colonial design is constructed of grey shingle and is in pleasing and harmonious contrast to the two facing English Cottage types, which are of grey-tan stucco.



FLOOR PLAN, HOUSE NUMBER TWO



HOUSE NUMBER ONE



HOUSE NUMBER THREE

The roofs are of green stained shingle. These two houses, while maintaining a certain similarity of structure, vary somewhat as to detail and floor-plan. Both have eight rooms, six on the first floor and two chambers surprisingly roomy with sloping ceilings. The central house is all on one floor, with living-room, dining-room, breakfast-room, kitchen, bath and two bed-rooms, and is larger than it appears from the front elevation.

The rear garden is shut off from the front lawn by a lattice fence extending from the middle house to the houses on either side, and this nearly covered by a luxuriant growth of shrubbery, forms an effective screen.

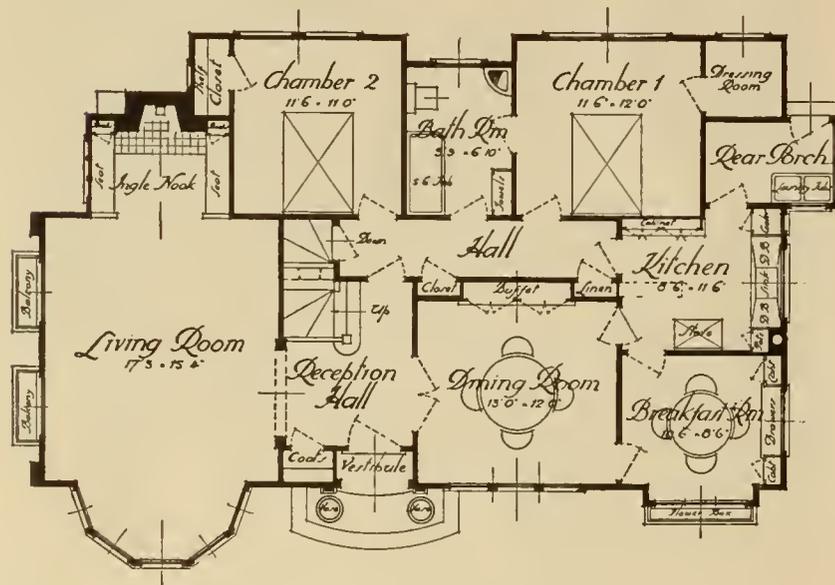
An outside feature worthy of note is the tiny brick-paved court at the back of the Colonial cottage, and which, opening from the dining-room can be used as a summer dining-room or sun porch. This charming little nook is screened from the back garden by a curved trellis, vine-covered, in whose sunny shelter is placed a well-designed garden seat.

The front doorway of the house to the left

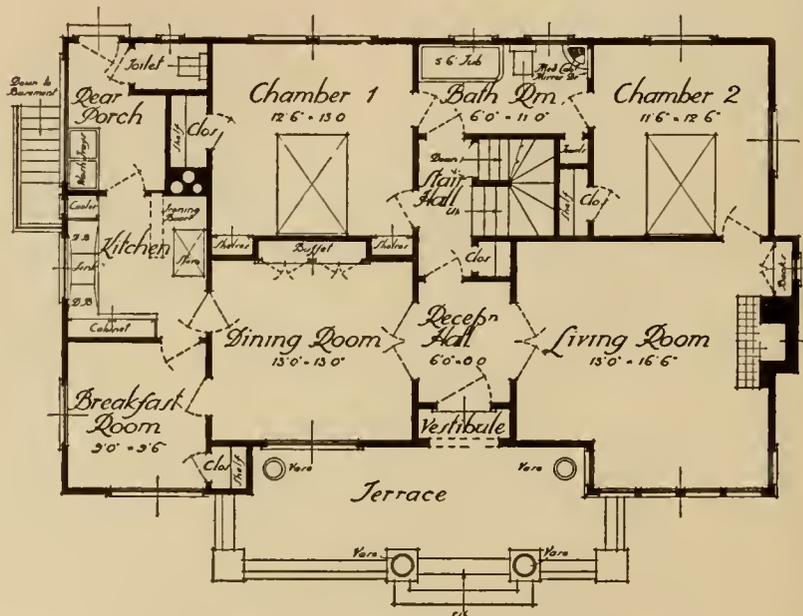
is especially interesting in its rythmical curves, accented by two prim little trees in tubs.

It is not quite easy to analyze the charm of this little group of houses by describing separate features and detail. There is a certain atmosphere of the picturesque, something which reminds us of the quiet beauty of little French houses, or English cottages. This quaint charm is enhanced by an unusually well-planned landscape setting of rapidly growing California flowers and shrubs, some of which have already reached the low caves and provide in themselves one reason for the desire of the nature-starved city dweller to become a "home-owner".

The plan as here described, of a group of detached houses is especially appealing to friends, acquaintances or members of a family who want to live near, but not with each other, and is an expression of the "community" idea with modifications which is becoming more and more popular in planning suburban dwellings.



FLOOR PLAN, HOUSE NUMBER ONE



FLOOR PLAN, HOUSE NUMBER THREE



THE GARDEN

NOTES ON BERRIED SHRUBS

BY KATHERINE JONES

(Continued From November Issue)

ARBUTUS UNEDO (Strawberry Tree).—Almost continuously in bloom, with whitish urn-shaped flowers followed by strawberry-like fruit. Used either as background or filler since it is somewhat drought tolerant and keeps its flowers well in sight. Its leaves are similar to those of our Christmas Berry, and it looks especially well with that species under our Coast Live Oak. Propagated by seeds. It will also grow from cuttings.

BERBERIS WILSONAE (Wilson's Barberry.)—A deciduous shrub which is very handsome when in leaf and bloom and berry but ugly for a part of the year with its black prickly stems. For that reason it is difficult to place it where it can be seen when perfect, and yet not have it intrude when leafless.

The berries are waxy and extremely dainty and last for some months.

COPROSMA BAUERI.—A rapid growing shrub with shining leaves and a stiff straggling habit unless kept down by pruning. In San Diego it is often planted at the base of houses and pinched back and pruned until it is thick and heavy. In this way it is very attractive. It has a glossy green foliage that will stand dust and soot but not much frost. The sexes are on different shrubs, hence plant some males among the others. It has orange colored berries borne well in sight on the leafless part of the branchlets but unfortunately they do not persist long enough to make them much of an object. Squirrels eat the berries.

As a berried shrub, it is not so attractive as many others. May be used as follows:

As a ground cover.

An embankment plant (prune severely).

Specimen plant.

Mass planting.

Tub plant.

CORNUS CAPITATA (Evergreen Dogwood).—One of the attractive berried shrubs if given good care. At the U. C. campanile it is always clipped so that it cannot develop fruit and, besides that, it is on a slope with drought resistant plants and does not receive enough water. At the bowling green in Golden Gate Park it is well protected from the wind, has attractive fruit which begins to color in September. Its flowers are large like those of Nuttall's Dogwood, a cream color which blooms in June.

COTONEASTER ACUMINATA.—A shrub 12 to 15 feet high with straggling and picturesque branches. Ideally placed in a canyon on the steep banks of a creek where it can be viewed from above. Berries often luxuriant and the plants quite in keeping with the naturalistic landscape.

Rather too large and stiff for small gardens and the berries drop early or are eaten by birds. They are orange in color and vary a great deal in their profusion—sometimes being 1 to 2 in a place and again as high as seven when seasons are favorable. They much resemble those of *C. franchetii* both in size and color.

(Continued on Page 79)

EDITORIAL

In a letter to the Editor of the "Survey Graphic", John D. Rockefeller, Jr., makes some significant statements concerning labor; statements which might almost be taken to be the demands or slogans of a reformer or a labor agitator. Without doubting Mr. Rockefeller's sincerity in his attitude toward "common justice" and human nature, it is evident that his reasoning is based upon principles of economic policy. No one should question benefits obtained on such grounds; no one, worth helping, desires to be an object of charity. Short of the millenium, such a stigma will rest upon any gains not justified by a sound economic policy.

Mr. Rockefeller says in part:

"I believe that generally speaking the twelve-hour day and the seven-day week should no longer be tolerated in industry, either from the view-point of public policy or of industrial efficiency; I believe that both have been proven to be unnecessary, un-economic and unjustifiable.

"As a matter of general policy, subject only to the demands of occasional emergency, modern industry is justified in accepting the eight-hour day and the six-day week, as a labor standard toward which all the parties interested should steadily press.

"While the adoption of these standards may and doubtless will at first entail increased costs of production; I am confident that in the long run greater efficiency and economy will result, and that from the outset public opinion will support any industry which installs them. The

same sentiment will eventually bring into line the less scrupulous and less enlightened elements in every competitive industry.

"With regard to living conditions there can be even less room for argument or division of opinion among men of clear vision and humane mind. Even in isolated locations like mining camps, it is not only possible but necessary that reasonable provision should be made for the health, comfort and contentment of those who may labor there in behalf of the entire community.

"I have never believed that these things should be provided for working men and women either as a result of chance generosity or deliberate paternalism. Quite aside from the fact that, in my judgment, they represent the soundest economic policy, they are due the employe as a matter of common justice, required by the basic fact that man is a human being first and a member of industry afterward.

"I would reaffirm the belief that sooner or later all such added burden is balanced by the increased efficiency and contentment of the laboring force and that less generous directors of industry in due time will inevitably follow the same course, if not through choice then under compulsion of public opinion.

"I welcome every aid from whatever source, as men of like mind and common purpose try to raise industry to a level of public service and thereby to make the world a better place for all men to live in."

The Building Review takes pleasure in announcing a special edition of the work of Allison and Allison, of Los Angeles, to take the place of the February issue. This firm is recognized as among the two

or three great school specialists of the United States, and an unusually complete presentation of their work will be given. Further particulars will appear in the January issue of the Building Review.



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DETAIL OF FIRST STORY
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MAIN ENTRANCE
METROPOLITAN LIFE INSURANCE BUILDING
SAN FRANCISCO, CALIFORNIA
JAMES R MILLER, ARCHITECT



GENERAL VIEW
METROPOLITAN LIFE INSURANCE BUILDING
SAN FRANCISCO, CALIFORNIA
JAMES R. MILLER, ARCHITECT



INTERIOR VIEW OF OBSERVATION PROMENADE

OBSERVATION PROMENADE
METROPOLITAN LIFE INSURANCE BUILDING
SAN FRANCISCO, CALIFORNIA
JAMES R. MILLER, ARCHITECT



THE LOBBY



REPRESENTATIVE DEPARTMENT

Growth of a Modern Life Insurance Building

The Metropolitan Life Insurance building clings to the side of Nob Hill, overlooking San Francisco, a modern Parthenon. It is, indeed, a temple; as of old, its portals are thronged with mortals bringing precious offerings to ensure the safety of themselves and their loved ones. The sentiment which inspired this choice of classic treatment is something which creeps into modern commercial life occasionally, not to be explained, not to

be resisted; however apparently anachronistic or unsuitable, a building like this is something to be thankful for. It is one of San Francisco's unique assets; and it is perhaps unkind for one to wish that its main facade had turned toward the valley instead of the hill. But as there is nothing to prevent its being screened by some future higher structure below, sentiment might have been indulged to no good. Let us take our Parthenon as we find it.

Like "Topsy" it just grew. The present home of the Pacific Coast Head Office of the Metropolitan Life Insurance Co. is the result of the phenomenal increase in the business of this company. The building was built in three units, each without any thought of further additions. The original building built in 1908 and intended to meet all demands for twenty-five years, now forms but the center portion of the south wing. Five years later two minor end wings were added, one of them now forming an end pavilion of the completed building. The facing of the other wing was removed in the final extension which carried the building through to California street, more than doubling the previous frontage and tripling the floor area. An attic was also added over the old as well as the new portion of the building.

In this unusual growth, the conditions forced on the Architects were ingeniously made use of and an exceptional and somewhat unusual design evolved. The one remaining wing of the first addition forming a strong end motif at Pine street which had to be maintained required a balancing motif of equal weight in the center, yet large piers could not be employed for lack of space, neither could the light be sacrificed. Consequently the strength was obtained in projection from the building face and by closer spacing and larger diameter of columns than in the side motifs.

The proximity of the building to the "lot line" left little room for the usual wide direct approach generally used. Hence a double side flight of stairs coming together at the center was used and permitted the buttress at the lot line which provides such pleasing strength under the pediment columns.

The attic is placed a sufficient distance from the main building face to completely hide the

windows and to show only the white silhouette against the sky.

The interior arrangement was greatly improved in enlarging. The added height obtained by the drop in the grade of California street permitted the introduction of a new supply and service entrance into the first sub-basement, thus leaving the ground floor on the level of Stockton street entirely for use as a clerical force entrance and clerical service floor with locker rooms, etc., and also housing the Mail division and central pneumatic tube terminal station which form one unit, and the Filing division.

The main floor done in marble and bronze, with ceilings in light buffs and gold, houses the Cashier's division and Executive offices and other departments requiring direct contact with policy holders. The second floor provides a large clerical work room and the Medical division offices.

The attic, with the exception of a small area at the north end given to Medical laboratory and Photostat room, is devoted entirely to the welfare of employees, containing a Cafeteria with a seating capacity of 500, Officer's Dining rooms and a Lounging room and promenade from which one of the most magnificent panoramas in all the world is viewed. To impress the magnitude of this: During the period last winter when the bay region was given its very rare treat to snow, an unbroken line of snow capped mountains completely encircling the bay was visible from Mt. Tamalpais to Twin Peaks.

The Architects, with the staunch co-operation of the company, endeavoured, and very successfully, to provide a building that, besides meeting practical needs, would be a pride to its city and an inspiration to its army of users.

Architectural Notes of Interest

ARCHITECTURAL FINE ARTS EXHIBIT

An Architectural Fine Arts Exhibit will be held in the Oakland Art Gallery during the month of February 1923.

The exhibitors will be made up entirely of East Bay Architects and promises to be one of the most interesting and instructive displays of its kind ever held on the coast.

The exhibition will be conducted according to the principals of the American Institute of Architects.

Any one desiring further information concerning this exhibit may communicate with W. R. Yelland, Architect, 414 Thirteenth Street, Oakland, California.

AMERICAN ACADEMY ANNOUNCES ITS PRIZES OF ROME

The American Academy in Rome announces its competitions for Fellowships in architecture, painting, sculpture and landscape architecture. The stipend of each Fellowship is \$1,000 a year for three years, and residence and studio are provided free of charge at the Academy. All Fellows will have opportunity for extensive travel.

The awards of the Fellowships will be made after competitions, which are open to unmarried men who are citizens of the United States. Special attention is called to the fact that in painting and sculpture there will be no formal competitions involving the execution of work on prescribed subjects, as heretofore, but these Fellowships will be awarded by direct selection after a thorough investigation of the artistic ability and personal qualifications of the candidates. To this end, candidates are requested to submit examples of their work and any other evidence that will assist the jury in making the awards.

Entries will be received until March first. Any one interested should write for circular of information and application blank to Roscoe Guernsey, Executive Secretary, American Academy in Rome, 101 Park Avenue, New York, N. Y.

JUDGES NAMED FOR HOSPITAL CONTEST

Architects Clarence H. Johnston of St. Paul and William B. Stratton, of Stratton and Snyder, Detroit, have been named as members of the jury of award of *The Modern Hospi-*

tal's \$1,000 prize competition for plans of a small general hospital.

Two of the five judges for the architectural contest are leading figures in the field of hospital administration, two are architects of standing, and the fifth is a graduate nurse who is superintendent of a hospital of the size stipulated in the competition. They are:

Dr. S. S. Goldwater, superintendent of Mt. Sinai Hospital, New York, hospital consultant, and former commissioner of health of the city of New York.

Asa S. Bacon, president of the American Hospital Association, and superintendent of Presbyterian Hospital, Chicago.

Clarence Howard Johnston, Minnesota state architect, former director of the American Institute of Architects, former president of the Minnesota chapter, and designer of the Charles T. Miller Hospital, St. Paul; St. Mary's Hospital, Rochester, Minn.; The City and County Hospital, St. Paul; various hospitals at Minnesota state institutions and many college and private hospitals.

William B. Stratton of the firm, Stratton and Snyder, architects of the Detroit General Hospital; the University of Michigan Hospital at Ann Arbor, Mich.; the Municipal Tuberculosis Hospital at Detroit; the Saginaw Women's Hospital at Saginaw, Mich.; the Detroit General Hospital, now part of the Henry Ford Hospital; the Wayne County Juvenile Court and Detention Home, Detroit; and the Municipal Tuberculosis Sanatorium and Children's Tuberculosis Hospital, Detroit.

Miss Adelaide M. Lewis, R.N., superintendent of the Kewanee Public Hospital at Kewanee, Ill.; graduate of the Hospital of the University of Pennsylvania at Philadelphia; postgraduate of the Presbyterian Hospital, Chicago; former superintendent of the Presbyterian Hospital, New Orleans.

This jury will meet in Chicago to consider the designs immediately following the formal closing of the contest on February 1, 1923. Registrations for the competition will be received at the Chicago office of *the Modern Hospital* on or before December 15.

Forty architects had registered their intention of submitting designs on November 1, the largest number being from the states of New York, Massachusetts and California. In addition to registrations and evidences of interest

from all parts of the United States and Canada, the contest is said to have attracted attention in France, Spain, England, Wales and even Algeria, Africa.

A LETTER TO THE BUILDING REVIEW

Editor, "Building Review",
San Francisco, California.

Dear Sir:

A serious situation faces the mining industry of California, a situation which may mean a blow at the prosperity of the entire State. May I ask your assistance in presenting the facts to the people of California and invite your suggestions in a campaign for making the mines safe and for preserving for California a great and constant asset?

The Industrial Accident Commission of California and the California Metal and Mineral Producers Association are working to improve the laboring conditions and perfect safety regulations of California mines. They are applying their resources, experience and brains to the task with the hope that there shall be no mining disasters. Nothing that is practical and sane will be left undone.

You will realize that the recent Argonaut mine fire has been responsible for a large number of suggestions for safety devices and regulatory laws, as well as for the mistaken impression that all California mines are unsafe. The coming session of the Legislature will probably see a score or more members with bills on the subject. Dozens of plans have been advanced.

What is needed is a sane program. What is feared is one born of hysteria and which will mean the closing of many California mines. It must be recognized that rules for one mine will not apply to another, that blanket legislation is impracticable. At the present time there are enough laws on the statute books and provisions in the mine safety orders of the Industrial Accident Commission of California to bring about any corrective or protective measures that may be suggested as a result of the Argonaut mine fire.

Gold mining in California is not hazardous. The records of fatalities in which fire figured show, that in 1867 two were killed in the Ione mine at Grass Valley; in 1880 four were killed at the Goodshow mine at Bodie, in 1907 eleven were killed in the Fremont mine at Dry Town and forty-seven were killed at the Argonaut mine this year. A total of 64 miners killed by fire since 1849.

This is a total not to be ignored or belittled, yet it is small compared with the fatalities in some other occupations.

It is the purpose of the Industrial Accident Commission of California and the California Metal and Mineral Producers Association to apply to the fullest extent the lessons learned from the Argonaut mine disaster. To that end I have been retained as director of publicity by the California Metal and Mineral Producers Association and ask your co-operation to present to your readers those things which have been done and will be done to make mining safer and to circumvent unjust and discriminate legislation at the next session of the Legislature.

We recognize that at present there is an unwarranted feeling of fear on the part of the miners in California and that, for the good of the State, the situation should be generally understood. Last year, for the first time in many years, California gained as a gold producer. This is a critical period in gold mining. Under a sane program such as the Industrial Accident Commission of California and the Metal and Mineral Producers Association are working out, progress will continue. If legislation born of hysteria is to be imposed, irreparable damage may result.

Will you help in keeping for California its mining wealth and prestige?

Cordially yours,
Frank L. Mulgrew,

Director of Publicity, California Metal and Mineral
Producers Association.

(Concluded on Page XIV)

THE GARDEN

(Continued From Page 75)

COTONEASTER FRANCHETII.—The leaves of this species much resemble those of *C. Pannosa*, being hairy and gray beneath. But they are larger as a rule and wrinkled above, while those of *C. pannosa* are smooth. The habit is more drooping and graceful and for that reason it is placed as a facer shrub in front of *C. pannosa*, which is taller, faster growing and more stiffly erect than *C. franchetii*. These are two of the berried shrubs that make a good mass planting, especially if *C. franchetii* is severely pruned every few years to keep it low.

The berries are orange, similar to those of *C. acuminata* and ripen about the same time. They are eventually eaten by birds while those of *C. pannosa* have an acid taste distasteful to birds.

C. franchetii is much like *C. pannosa* but foliage more drooping, berries larger, not so numerous and orange in color, while those of *C. pannosa* are red. It has a tendency to bloom and fruit at the same time, so there are fruits of different ages that are not ripe at the same time. However, not a fault excepting that the flowers are disappointing for that reason.

COTONEASTER FRIGIDA.—This is a tall deciduous shrub with rather open branches. The leaves are three or more inches long, green above and gray beneath. The flowers are white followed by scarlet berries in large clusters—as many as 50 to 200 in one bunch. These clusters are so large and there are so many of them that the bush is brilliant even without the leaves, which fall so soon as frost touches them, say from November on or in late seasons they may last until January. The berries ripen in September and are usually fine until the last of January.

It is not suited to a formal garden, but may be used in the background or may be partially hidden by shrubbery, or may be used as an accent plant.

COTONEASTER HORIZONTALIS. — A low growing plant up to two feet tall and with a spread of from 3 to 7 feet. It holds its branches horizontally in two ranks about an inch apart, making flat sprays. The berries are without pedicels and stand up on the branchlets, every berry in sight both from above and below. Berries are a bright red

(Continued on Page XI)

INDUSTRIAL



GARAGE BUILDING EQUIPPED WITH STEEL SASH WINDOWS

California Steel Windows

More Daylight for Less Money Is Now Possibility Within Reach of All Interested in the Building Industry on Pacific Coast

In former days there existed in France a tax on windows, with the result that these necessary purveyors of air and sunshine were cut to a minimum and the solid wall was much in evidence.

In our own country, the high prices of window openings have had a similar effect on building construction. This condition has been particularly noticeable in factories, warehouses and other industrial buildings. As long as the dead wall was cheaper and a better fire barrier than the window, the dead wall won out.

During the last few years, however, the steel windows have been decreasing in price until they have now reached the point where the steel window is cheaper than the solid wall, or even the wooden window—a condition which has created an entirely new type

of building containing a maximum of light and air.

The Atlantic states enjoyed these benefits earlier than the Pacific Coast. In the past, local builders have had to pay, in addition to the cost of the material, a substantial freight and handling charge which reminded one of the blessings of that old French window tax.

The Pacific Coast, however, is now coming into its own, and the manufacture of steel windows has become one of the important industries, reducing the price on this essential article to about one-fourth of what it was only two years ago.

Architects and engineers, who in the past have been forced to rely on steel windows from the eastern factories, have been tied down to the standard stock sizes, and in many instances penalized both in price and in delay of delivery.

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About three years ago the Michel and Pfeffer Iron Works of San Francisco began the fabrication of steel sash with material imported from eastern rolling mills, similar in design to the sash bars used by most of the eastern sash factories, having a small molding on the face of the bar.

Two faults of these molded section bars were soon apparent. Many California industrial buildings, including packing houses, canneries, creameries, bakeries, etc., especially when located in the interior valley, required good ventilation during the heat of the summer months, together with a reliable safeguard against the unhygienic fly. This called for ventilators with screen protection.

The prices of eastern made screens made this type of ventilator impossible, except in instances where cost was no object.



STEEL SASH AS FIRE PROTECTOR

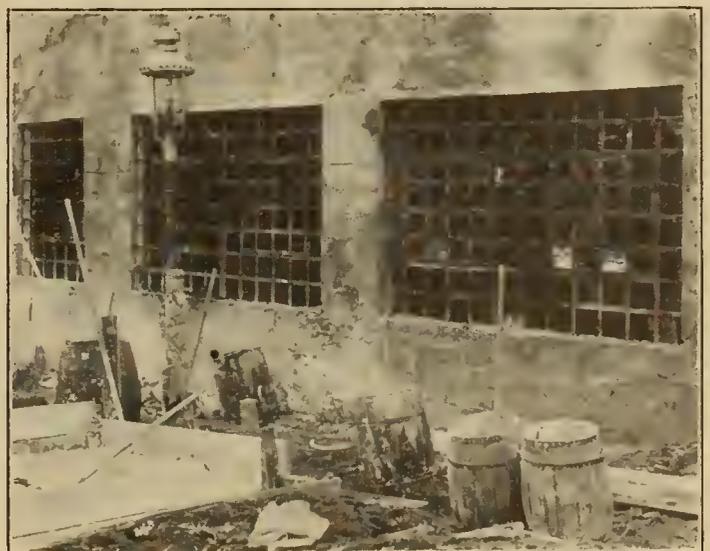
To overcome this handicap the local manufacturers introduced a steel window built of standard bars, the flat surface of which permitted the installation of a better facia screen at a greatly reduced cost. These screens are constructed of copper screening, held in a galvanized steel frame and fastened to the sash with brass screws tapped into the framing, thus creating a removable screen.

The use of this flat surface T-bar overcame the second fault found in the molded section, i.e., the danger of corrosion of the steel bars, especially in the coast cities, where salt air and fog prove destructive to any iron work that catches or holds moisture.

The flat T-bar, creating no obstruction to the downflow of the water at the crossings of the muntins, proved the ideal solution.

After these new windows had passed the experimental stage and proved a success in every respect, the local manufacturers approached the Pacific Coast Steel Company, with rolling mills in San Francisco and Seattle, with the request to roll steel sash bars especially adapted to window use.

A bar was designed with a narrower facia



STEEL SASH AS BURGLAR PROTECTOR



CRYSTAL PALACE MARKET
SAN FRANCISCO, CALIFORNIA
COLEMAN, ARCHITECT

than the standard T, giving a maximum glass surface, and the backing rib was deepened to give greater stiffness to the whole panel.

With the co-operation of the rolling mill the "California Steel Window" became a true Native Son, traveling from a California Rolling Mill through a California Workshop and into California Buildings.

This has proved a decided advantage to architect, engineer, builder and owner. The first advantage to be noticed was the lowering of the price and in consequence the extended use of steel sash in all types of building construction. Where, before, the use of steel sash was confined to substantial concrete and brick buildings, owners now place steel sash windows in small frame sheds, saving both in the price of the window and in the cost of installation.

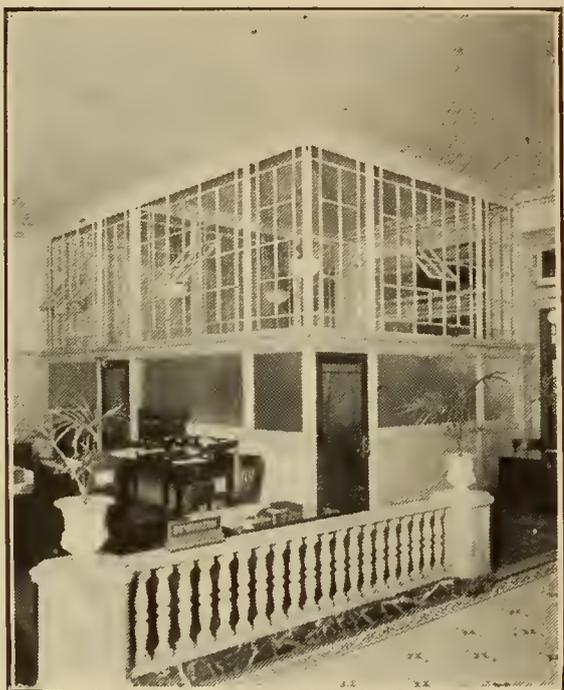
Another advantage was the fact that architects could follow out their own ideas in laying out fronts, not being held down to standard sizes. A pleasing example of this is

shown in the accompanying illustration of a garage with large circular windows.

An ever increasing number of architects are taking advantage of this freedom of design by naming these steel windows in their specifications. Aside from industrial uses the various designs are applicable to a variety of uses in other fields, such as sun porches, pergolas and roof gardens, and as inside partitions in offices.



STEEL SASH ON THE ROOF GARDEN



STEEL SASH AS OFFICE PARTITIONS
PALACE HOTEL, SAN FRANCISCO

Another valuable feature of local adaptability is steel sash as burglar protection. Where this is desired, the horizontal and vertical muntins are usually placed eight inches on centers, making in effect a window guard with glass in it. This arrangement is cheaper than a window plus an iron guard, and easier to keep clean.

The personal service and prompt delivery are other features of vital importance. All standard sizes are carried in stock and ready for immediate delivery. "Specials" can be fabricated on short notice at a nominal cost. On large "rush" jobs this service proves of great advantage. On the Crystal Palace Market, San Francisco, the bulk of the windows

(Continued on Page XIII)

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BUY AND BUILD IN SAN FRANCISCO PROGRAM BRINGS RESULTS

November is the eleventh month of a sizeable real estate and building boom that San Francisco has been developing during 1922. The increase came about so gradually and grew so rapidly that it has almost been carried on unnoticed. When other forms of business activity have only been showing a nominal return toward prosperity both real estate and building have steadily gone ahead.

Real estate transactions in San Francisco in the month of November again passed the \$10,000,000 mark as reported by Thomas Magee & Sons, bringing the total for the first eleven months of this year up to \$120,000,000, a sum indefinitely larger than any previous year. A total of 1,135 sales valued at \$10,748,560 were recorded during the month.

Building construction maintained a healthy proportion during the month, although experiencing a slow seasonable reaction from its high point reached during the summer months. The value of building permits recorded during November was \$2,621,471 as compared with \$2,144,606 for the same month in 1921. Building for the year will aggregate over \$40,000,000. Building permits for November aggregated 638, only slightly under the previous month, showing that the construction of homes and small structures was only slightly retarded by the coming winter season.

This activity in the building industry is largely attributed to new capital and residents coming into the city. The confidence in the future of San Francisco is felt by her present citizens and is being impelled by the aggressive advertising campaign carried on by the San Francisco Forward Movement, "Buy and Build in San Francisco", which has found a ready response.

 STOCKTON OUTLINES BUILDING PROGRAM FOR 1923

BY GILBERT D. KEITLE

The number of building permits issued in Stockton for eleven months of the present year reflect a 40 per cent increase over the entire

previous year, while the value of permits for the same period increased 56 per cent over those of 1921.

Not for years has construction work of all kinds been so active at this season and there is every indication that the winter months will pass with all of the building trades mechanics employed throughout the season.

The National Paper Products Company is constructing an addition to its plant, the estimated cost of which is \$41,000. The improvements consist chiefly of an addition to the roll pit to enable a larger storage of finished board. Several brick storage bins for raw materials and a traveling gantry crane are being installed to facilitate the handling of materials.

Improvements in its Stockton warehouse, costing approximately \$35,000, are being carried out by the Western Pacific Railroad company. A new bulkhead, fronting on the waterfront, and extending the full length of the building is being constructed. With the completion of this work, a concrete floor will be laid and the capacity of the house increased.

A complete renovation of the four-story building at the southeast corner of California and Channel streets, which has been renamed the Exchange Building, is being made. The structure will, when completed, contain 26 offices and seven stores. A marble front will adorn the remodeled building. Peter L. Sala is the architect for the building, and it is estimated the improvements will cost approximately \$50,000.

Excavation has started for a business building to be erected at the southwest corner of Sutter and Channel streets, to cost \$30,000. A foundation suitable for a building several stories in height will be constructed although the owner plans only to erect one story at the present time.

Work of razing the buildings on the two blocks to be occupied by the memorial auditorium and the city hall is progressing satisfactorily, and it is expected the construction on these two structures will be started shortly after the beginning of the new year.

Rapid progress is being made on the two-story Black business block on Weber avenue,

(Continued on Page XIII)

THE GARDEN

(Continued From Page 79)

and conspicuously placed against the light green leaves.

Good for rockeries and for Japanese gardens. Habit neat and compact. Slow of growth, hence good for facer, or may be placed at corners of drives where a low shrub is needed.

This is deciduous for a portion of the winter and is then black and ugly. For this reason it is best to plant it where it does not have to be inspected when barren of leaves. In Southern California they claim that it is almost evergreen so that its pinkish white flowers, followed by scarlet berries, make it exceedingly attractive. Its leaves also turn red during the winter and add to the color note of the berries.

COTONEASTER MICROPHYLLA.—(Rosebox.)—A low growing berried shrub of prostrate habit, almost constantly in bloom and always in berry. The berries are carried well in sight, are of a purplish red with a whitish bloom over them which distinguishes this species from all others so far introduced.

Good for facer shrub, for rockeries for retaining walls and sides of garden steps since it is low, neat and always ready for near inspection.

Of easy culture but must have occasional waterings during summer.

Propagate from cuttings or seeds, better from cuttings as the seeds do not always come true to type.

COTONEASTER PANNOSA.—A shrub 6 to 12 feet tall with red berries in clusters and leaves gray beneath. It is beautiful both in fruit and flower.

It groups well with *Cotoneaster franchetii* which is lower and more graceful and should therefore be placed in front of the *C. pannosa*. These two species are hard to distinguish when in leaf, but observe that *C. pannosa* has a smooth leaf above and *C. franchetii* is larger and fewer of them in one place. Propagate by cuttings.

HIPPOPHAE RHAMNOIDES.—(Sea Buckthorn.)—A deciduous shrub with gray alternate leaves and covered with silvery scales. The twigs are spiny, which gives it its specific name *ramnoides*. It generally grows on the seashore, hence not expected to thrive in our valleys away from fog and moisture. Flowers on old wood, therefore prune back after berries have fallen. This shrub is dioecious,

i.e., male and female flowers on different shrubs. Blooms in late spring and early summer and the berries appear soon afterward. These berries last from 4 to 6 months at Golden Gate Park and are the chief beauty of the plant. They are a bright orange, held conspicuously in place and not eaten by birds. Although Buckthorn likes plenty of water it will thrive without it, but berries always look better if given some water just before ripening.

You may propagate by seeds or cuttings. Cuttings are far preferable, as you then know the sex and know what you are getting. With seeds you may have a preponderance of male plants when it is better to have only one male to about a dozen pistillate plants.

LONICERA HISPIDULA VAR, CALIFORNICA.—(California Honeysuckle).—This is a scandent shrub or may clamber into trees and become a vine. It is a native of California and is beautiful either in fruit or flower. It will absolutely take care of itself and is attractive most of the year. It would be good in a busy man's garden, or placed in the outer area of a large estate away from the hose. The berries look well for months.

Landscape value:—Shrub, climber over trees, also an embankment plant.

It grows naturally along stream banks, hence looks better if given some water, but it will thrive and ripen its berries with none.

MAHONIA JAPONICA.—It looks like Oregon Grape, but the leaves are larger and splashed with white. The yellow flowers are followed by attractive blue berries. It will stand the full sun here but must be planted in the shade in the hot interior valleys where its leaves are a good green in the shade but turn coarse and are marked with yellow in the sun.

Propagated by seeds or cuttings or layering.

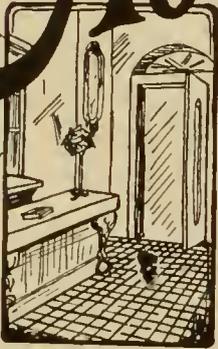
NANDNIA DOMESTICA.—(Sacred Bamboo.)—Six to seven feet tall. Very slow growing. Good either for foliage or berries. Not warm enough to berry well near Coast, but in the interior valleys berries are very fine, also the leaves turn reddish in winter and berries and leaves make a bright spot on landscape. Flowers yellowish white. Propagate by seeds or by division of roots.

PERNETTYA MUCRONATA.—Neat evergreen shrubs not unlike *Myrtus communis microphylla*. There are many hybrids which are mostly offspring of *P. mucronata* (so-named from the sharp point of the leaf). *Pernettyas*

(Continued on Page XVII)

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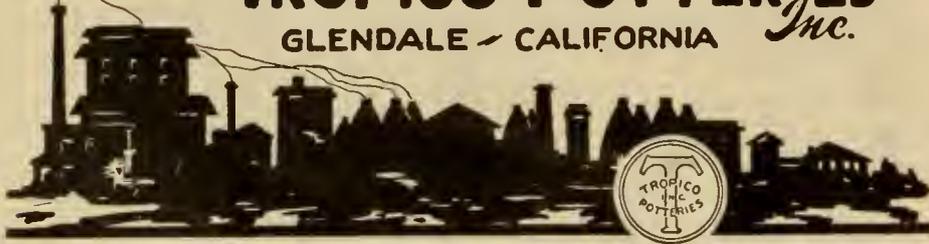
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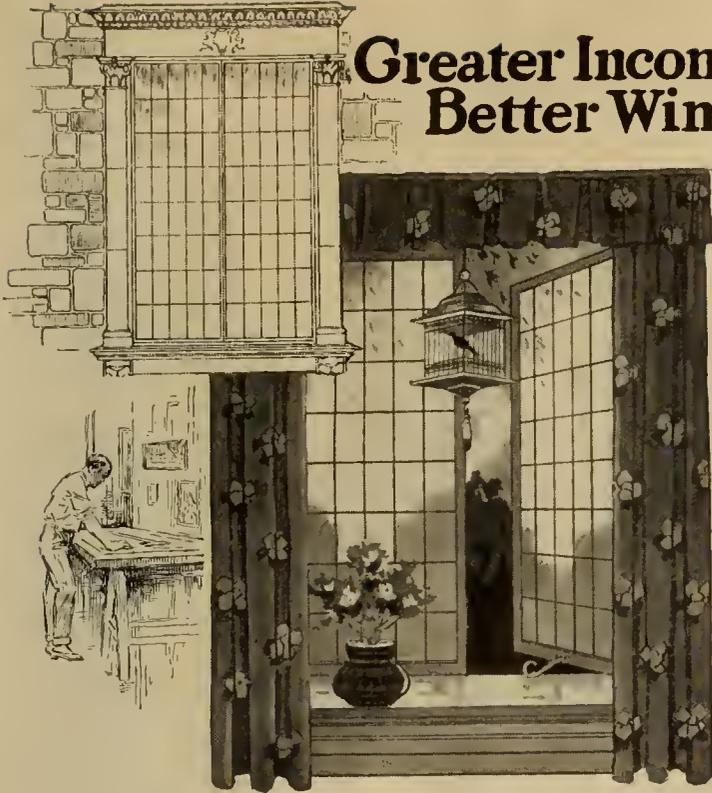
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BRANCHES IN PRINCIPAL CITIES

(Concluded From Page 82)

were taken out of stock, but as the building progressed a number of unforeseen changes had to be made to satisfy new tenants. With the steel sash factory in the field these changes were easily made without loss of time.

There are now more than 400 buildings in San Francisco and vicinity equipped with "California Steel Windows"—a real testimony to personal service, low prices and the adaptability of local enterprise.

STOCKTON

(Concluded From Page 84)

which is to contain a number of stores and offices. The new building will not be ready for occupancy until after the first of the year.

A new isolation ward, costing \$50,000, is nearing completion at the San Joaquin County Hospital near Stockton. Construction was started about four months ago.

Articles of incorporation have been filed by the State Building and Loan Association, making a fourth organization of that kind for Stockton. The association is incorporated for \$250,000.



GARAGE

STEWART, ARCHITECT

SACRAMENTO TO SPEND \$3,500,000 FOR NEW STATE BUILDINGS

BY IRVIN ENGLER

Publicity Manager Chamber of Commerce,
Sacramento, California

It was predicted, at the beginning of 1922, that the year would see Sacramento's building record tremendously increased. The most sanguine prediction, however, fell short of the building total actually recorded. Approximately \$10,000,000 was expended for building construction during the year—more than twice the total for 1921 which, incidentally had eclipsed all previous years.

The most gratifying feature, from Sacramento's viewpoint, is that approximately half of the \$10,000,000 was for residences and apartments, proving conclusively that the city is scoring heavily in population increase.

Another phase of the building activity which gives cause for Sacramento people to rejoice, and which, indeed, is of importance to the entire State of California, was the beginning of construction on state buildings, which will cost \$3,500,000. Construction of these buildings had been delayed for eight years because of the condition of the bond market, and the fact that the bond issue, taken in its entirety by a California financial institution at the beginning of the year, brought a premium, was the incentive for further optimism.

Included in the other major building operations of the year were: Twelve-story home office building of a life insurance company, a bank, \$250,000 hospital, large automobile distributing branch, warehouse for department store, three office buildings, and completion of the city's \$5,000,000 school building program and \$2,700,000 filtration plant.

Practically all lines of business in Sacramento found 1922 a profitable year.

Agricultural production was exceedingly satisfactory, particularly the three principal crops of the Sacramento section—asparagus, pears and grapes. The value of these crops alone in Sacramento county totaled approximately \$20,000,000.

There has also been a marked increase, during the past years, in the colonization of the great irrigation and reclamation tracts of the Sacramento Valley, as well as the suburban

fruit and poultry sections surrounding the city of Sacramento.

The Fruit and Agricultural Department of the Sacramento Chamber of Commerce is particularly active in the work of placing newcomers where they will be successful and prosperous. The problem of transportation is still of considerable concern, particularly with regard to shipment of the grape crop. Although the shipment of grapes during the past season broke all previous records, there were many tons which could not be moved to the eastern market because of the car shortage. Solution of this problem is in early prospect.

All things considered, 1922 was a highly satisfactory year from the viewpoint of all lines of endeavor. The employment situation showed a pronounced improvement over the preceding year, while the bank clearings and deposits maintained their percentage of increase.

Sacramento enters the new year with an air of confidence and optimism with a feeling that it is noticeably forging ahead and that the next twelve months will see new records set in agricultural and industrial production, as well as continued activity in building construction.

Architectural Notes

(Concluded From Page 79)

ARCHITECTS CHAPTER ELECTS OFFICERS

Sumner P. Hunt was re-elected to serve as president for the year 1923 of Southern California Chapter of the American Institute of Architects at the meeting held Tuesday evening at Palais Royal Cafe. Other officers re-elected were: A. M. Edelman, vice-president; Chas. F. Plummer, secretary; and Alfred W. Rea, treasurer. C. E. Noerenberg was elected as a director for a three-year term.

Myron Hunt, J. J. Backus, S. B. Marston, D. C. Allison and Harwood Hewitt were elected delegates to represent the Chapter at the annual Institute national convention to be held at Washington in 1923. The date has not been definitely determined. Myron Hunt received the highest vote and will act as chairman of the delegation. The alternates elected were: A. M. Edelman, Wm. M. Clarke, C. E. Noerenberg, Winsor Soule and Alfred W. Rea.

Review of Trade Literature

LINOLEUM FLOOR COVERINGS

Three new books descriptive of Linoleum Floor Covering are ready for distribution by the Armstrong Cork Company, Lancaster, Pa. "BUSINESS FLOORS" is designed for architects, builders and business men who are interested in more efficient offices and particularly floors for these offices that are more durable, comfortable and clean. "Detailed Directions for Laying and Caring for Linoleum" covers practically every point on the laying and caring for linoleum. "The Story of Linoleum" gives in an informal way how linoleum was invented and contains all the technical information regarding manufacturing processes. These books are bound in attractive covers and contain among other illustrations many plated in color descriptive of the various designs of this particular type of floor covering.

BRIXMENT FOR PERFECT MORTAR

Brixment for Perfect Mortar is the title of an illustrated book issued by the Louisville Cement Co., Inc., Louisville, Ky., descriptive of a cement mortar with architectural advantages. This book contains 14 pages of illustrations and text explaining the process of manufacture of Brixment and giving other such information about this material that is of value to both architects and builders.

RIPOLIN ENAMEL PAINT

The Glidden Company, Cleveland, Ohio, have two new books for distribution that contain much of interest to the Architect, Contractor and home owner. A specification book of 12 pages shows the proper method of application of this product under various conditions. **Why Ripolin has an International Reputation**, a book containing over fifty illustrations shows many varieties of uses in hotels, clubs, homes, hospitals, many kinds of industrial work, marine use and others. These books are of standard letter size and conform to A. I. A. Standards.

TILING

For the architect, contractor, builder or home owner interested in tile and its adaptation in the home, industrial plant or office building the Associated Tile Manufacturers, Beaver Falls, Pa., have published a series of essential books. "Basic Information" gives information relating to each make of tile with statements concerning grades, colors and sizes and shows graphically and to scale the shapes and relative proportions of tiles, classified according to kind. **Basic Specification for Tilework and Related Documents**; a book of specifications compiled by experts throughout the country. **Ceramic Mosaic**, the first section of a more comprehensive publication which is in preparation containing over 200 illustrations in color of various types of mosaic. **Swimming Pools**, a 32-page book, letter size, with 50 illustrations and diagrams of various swimming pools in homes and in public institutions, clubs, etc. **Home Suggestions**, a book containing 12 full page illustrations in color suggesting many attractive uses to which tile may be placed in the home. A few of the suggestions covered are the tile reception hall, living room, fireplace, dining room, sunroom, bathroom, kitchen, laundry, garage, veranda, etc. Of special interest to the Architect is **Work Sheets for Specification Writers** containing documents relating to specifications for tile-work.

INDIANA LIMESTONE

Volume four of the Indiana Limestone Library—Series B. A letter size book containing illustrations of over 50 different banks throughout the United States which are constructed of Indiana Limestone. This book is well put together with an attractive cover in color and will prove a valued addition to an architectural library.

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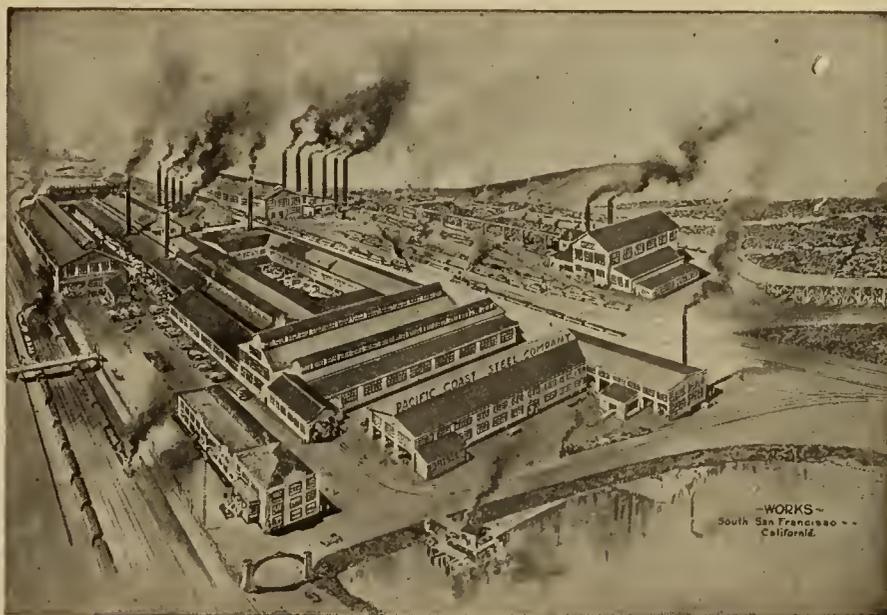
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(Continued From Page XI)

are much liked for their low dense habit, ever-green leaves and decorative berries. Here, however, many of the varieties so far introduced have dark fruit and even the flowers are quite inconspicuous, but in England they have forms with bright red berries.

Landscape value: Good for rockeries, facers and pot plants, and holds its berries through the fall and winter.

Cultural requirements: Likes cool, moist soil with plenty of peat or decayed leaves and a soil free from lime. Plant in the sun. Ericaceae family. Propagate by seeds or cuttings.

PHOTINIA ARBUTIFOLIA. — (Christmas berry).—One of our most attractive native shrubs on account of its dark green foliage and its bright red berries. It groups well with Coast Like Oak, Catalina Cherry and Oregon Grape, since all are drought resistant and the leaves all have the same shape and texture. Place the Christmas Berry next to the oak and the Oregon Grape as the facer shrub.

Not only does the Christmas Berry group well in mass planting, but the flowers bloom in July when most needed, and the berries are at their best from late fall until Christmas, when they give an attractive color note to the landscape. Propagate from seed.

(Concluded in January Issue)

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Studio Homes

(Concluded From Page 72)

each and every instance the purse string was either a short one or only a moderately long one. Occasionally such individual places can be rented, but the exorbitant rents make them prohibitive for the average incomes, and, besides, a borrowed treasure is never enjoyed like one's own.

The large, pretentious, formal and expensive house is suited to an entirely different life and so it cannot be the same in atmosphere and charm. Usually the small house has the same number of rooms as the apartment or flat, but the size, shape, exposure and its own separate roof give it an atmosphere and charm that it is impossible to get in any other way. Privacy without isolation is a rare and coveted combination, but most often found in studio homes.

It is difficult to find one which is not located on a hill. Two, so located, are shown in the photographs. When at night these are lighted up they resemble Japanese lanterns hanging on the hillside. They are built in Japanese style, and with Japanese gardens as the proper setting. One was designed for an American art teacher by an American architect so that the art teacher might have a week-end and vacation home. There she gained peace of mind and new inspiration for her work. As will be seen by the accompanying picture, the interior is strikingly Oriental, and yet American enough to include a friendly fireplace. Sliding partitions on the outside cover the windows, which extend from the floor to a height of eight feet around three sides of the living room or studio, and give added protection when the owner is away. The small windows seen in the picture are in the kitchennette, and are the only small ones in the house.

A view of the living porch and from the living porch of the other hillside-Japanese-lantern-studio-home, is shown in the photographs. In this other house is a six-foot field stone fireplace, a portfolio kitchen and every room opens on to the living porch by means of French doors. In this compact little house are many unusual features, but the most unique is the portfolio kitchen, which is shown in the accompanying sketch. It is really just a recessed cupboard off of the living room, and is especially appreciated by the person who has very little time, energy, or inclination for elaborate house-keeping. Here there is very little space to

keep in order or to clean, and yet everything that is needed for the preparation of a meal is within arm's reach.

In the sketch French doors, hinged and curtained, are seen, but if space allowed these doors might slide entirely out of sight. The finish of this portfolio kitchen is tile, and the shelf upon which the sink and stove are placed is vitrolite. An electric stove is seen. The bathroom is provided with shower, lavatory, toilet and an electric washing machine, so that not only the people, but their clothes are kept in an immaculate condition with little effort. This combination really represents the one-room-studio-home with alcoves for sleeping, dressing, bathing and cooking.

Usually these tiny places are built of wood but the illustration shows one attractive exception made of concrete with a slate roof. Invariably the living room is large, with many built-in features, which not only reduce the cost, but do not take up so much space and add to the usefulness and attractiveness.

If so much housework is eliminated, and so much pleasure results from the few studio homes, why not go to the nearest hillside and try the same experiment?

Indiana World War Memorial

Notice to Architects

NOT later than March 15, 1923, the Board of Trustees of the *Indiana World War Memorial* will receive at its offices in The Chalfant, N. W. Corner of Pennsylvania and Michigan Sts., in the city of Indianapolis, Indiana, competitive "designs, plans and specifications" for a World War Memorial to be erected in the city of Indianapolis at an approximate cost of \$2,000,000.00.

Full information in regard to the competition may be had by addressing

PAUL COMSTOCK, *Secretary*

The Chalfant,
INDIANAPOLIS, INDIANA

(This competition is approved by the Standing Committee on Competitions A. I. A., and is to be held in accordance with A. I. A. principles.)



