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Myron Hunt, Architect

THE ARCHITECT

PLATES

- Residence of Samuel S. Hinds, Pasadena
- Residence of F. H. White, Jr., Pasadena
- Residence of W. J. MacDonald, Pasadena
- Residence of Julius Seyler, South Pasadena
- Residence of Mr. Loring, Pasadena
- Residence of Mrs. B. C. Keck, Pasadena
- Country Home of Chester Thorne, Tacoma
- Residence of Dr. A. J. Bouffleur, Seattle
- Sunken Garden—Estate of Mr. Schiffman, Pasadena
- Bard Residence, Hueneme, California
- Roof Garden—Morshead Apartments, San Francisco
- Residence of Miss Mary Phelan, San Francisco
- Residence of J. W. Burnes, Pasadena
- Homewood House, Cuffley, England
- Residence on Estate of George Lent, Redwood City
- Residence of C. W. Brock, Berkeley
- Residence of Mrs. R. W. Rives, Montecito
- Garden of Dr. Guy Cochran, Los Angeles
- Residence of Elmer Grey, Pasadena
- Gateway to Garden of C. D. Blaney, Saratoga
- Formal Garden of Miss Alexander, Piedmont
- Residence of Miss C. A. Culbertson, Pasadena
- Residence of Dr. Guy Cochran, Los Angeles
- Sigma Chi Chapter House, Salt Lake City
- High School, Watsonville

TEXT

An Italian Garden in an American City
The American Academy in Rome
Official News of Pacific Coast Chapters, A. I. A.
Editorial

Garden Accessories

The "Japanese" Bungalow

INTERIOR DECORATION

The Light-Colored Wall

THE CONTRACTOR

How Costs Are Kept Under the Cost-Plus-Fixed-Fee Contract
One Way of Getting Results

F. A. Wells

THE MANUFACTURER

Reference Index of Advertisers

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AN ITALIAN GARDEN IN AN AMERICAN CITY

BY WILBUR DAVID COOK, JR.
FELLOW AMERICAN SOCIETY LANDSCAPE ARCHITECTS—PRESIDENT PACIFIC COAST CHAPTER

In the October number of The Building Review Miss Matson has written a most interesting article on the informal development of the Leffingwell place at Pasadena.

This article is written, by way of contrast, on the formal development of a city lot of two and one-quarter acres. In the case of the former the landscape architect was called in at the very beginning of the work, in the latter after the house was nearly completed.

In a way the problem was much more complicated because certain fixed conditions had to be met, modified or overcome. The Pasadena place possessed area and outlook. This one possessed outlook, but the appearance of area had to be created.

This was accomplished by planting low shrubbery along the fixed and rigid boundaries of the lot lines, and by
"THE HOUSE ... SUGGESTS AN ITALIAN GARDEN, WITH RETAINING WALLS, STEPS, POOLS, PEROGLAS"
emphasis of the distant views. The writer regrets very much that his absence from the city for the past two years and lack of time since his return has alone prevented him from presenting more recent photographs of the place showing how completely this end has been attained.

A brief description of the original problem may be of interest. The property had a north frontage of two hundred feet and a depth of five hundred feet, with a difference in elevation between the front and the back of forty-five feet. From the street it ran back almost level for a distance of one hundred and fifty feet and then dropped abruptly on a forty-five degree slope to the back.

The architects (Hudson & Munsell) had placed the house back about one hundred feet from the street and about midway of the lot, and the house was so large that it came within fourteen feet of the east property line and about twelve feet from the west. The service end of the house was on the east side, which determined the location of the service yard and the service drive.

A semi-circular entrance drive was planned passing the front entrance steps, branching to the east to the service yard and to the west to the garage drive, with the garage and servants' quarters below.

It was apparent that the garage drive could not follow the natural surface of the ground (some thirty-five per cent) and the problem was how to reduce this grade.

This was accomplished by building a retaining wall on the west side of the west drive and making the driveway fill from the excavation of the formal garden. This fill was made to exactly balance, so no dirt was brought in or removed from the property.

A major axis line was established cutting through the front entrance steps, the house, south loggia and south terrace and bisecting the rear property line in almost its exact center. Fortunately this axis line terminated on a most interesting eucalyptus tree.

The house, being of the Italian Renaissance type, suggested at once an Italian garden, with retaining walls, steps, pools, pergolas and different levels. The architects had built a pergola on the south terrace for the purpose of screening the immediate foreground below, which consisted of modest bungalow homes.

Had the landscape architect been called in earlier he would have suggested two semi-circular pergolas at the east and west ends of the south terrace, backed with lattice to screen the service yard on one side and the garage drive on the other, and secured the same screening effect by his terminal pergola on the major axis line.

This would have opened up more completely the view over the formal garden from the south loggia, made a less interrupted connection between the two, and created at once an effect of area well worth while. This should yet be done.

A minor axis line was established midway of the formal garden, leading at the easterly end up a flight of steps to the higher level, and terminating the vista by an ornamental propagating house.

The higher level was planted out to flowers, presenting a blaze of color when in bloom and affording a supply of cut flowers for the house. The formal garden was more restrained and dignified, the central area consisting of turf panels and an oblong lily pool.

The areas between the boundary walks and the retaining walls were planted with low shrubbery, and the walls covered with Ficus repens (climbing fig). Italian cypress trees mark the architectural entrances to the garden.

A semi-circular flight of steps connects the terminal pergola with the garage drive; immediately across this drive another flight of steps leads to a terraced vegetable garden, greenhouse, and cow barn, all completely concealed from the upper levels. Immediately in front of the terminal pergola another pool was placed for reflection effects.

(Concluded on page 6)
NOW that attention is again directed to Italy it will be of interest to Americans to read the story of an outpost of American culture in the Eternal City. The American Academy in Rome has just closed an exhibition at the Century Club in New York, of the work of its graduates—architects, painters, sculptors. These men are leaders in American practice and talent in their respective fields. The American Academy in Rome has placed its stamp upon them, giving them the weapons with which careers are carved, knowledge and technical training in constant association with the workmanship and prowess of Renaissance Rome as well as the ancient city of the Caesars. They have thus been able to make contact with the channels of thought that guided the artistic output of an age the emulation of which is at once our joy and our despair.

The exhibition in question contains examples of the work of the architects John Russell Pope, Lucian Smith, H. Van Buren Magonigle, Edgar I. Williams, William S. Koyle, Alfred Githens; the sculptors, H. A. MacNeil, Charles Keck, Paul Manship, John Gregory, Albin Polasek, Sherry Fry; the painters, F. Tolles Chamberlin, Eugene Savage, Barry Faulkner, Ezra Winter, F. P. Fairbanks, Charles Stickroth, all of whom owe a debt of gratitude for a golden opportunity to the foresight of the founders of the Academy and to the energy and educational policy of its present administrators.

The American Academy in Rome is an established institution with a history beginning in 1894, over a quarter century of yeoman work and unbroken faith, so that the best traditions of the arts might prosper on our own soil. It was in the fertile brain of that most distinguished orna-
ment of American architecture, Charles F. McKim, that the idea of such an Academy was born. Under his fervor and enthusiasm, together with that of Daniel Burnham, it took shape. To their unswerving devotion to this idea, their gifts to it of money and time; to their inspiring example; to the years of Frank Millet's unselfish service, and to the adherence of such others as La Farge and Saint-Gaudens, now gone, Moro, French and Blashfield, happily still active among us, that the seed came to its present fine fruition.

In Rome the American Academy occupies the finest site in the city. Its buildings stand upon the summit of Mount Janiculum, the highest point within the walls. Near its gates lies the ground over which Garibaldi fought in 1849; in one of its buildings he made his headquarters for the last time and the siege left it in ruins. From the Academy windows and terraces one sees the dome of Saint Peters, mother church of them all, and all Rome lies stretched out beneath.

Mr. C. Grant LaFarge, secretary of the Academy, who is devoted to the principles which have been its guide for twenty-five years, writes enthusiastically of its great work: "The American Academy in Rome offers opportunities for architects, painters and sculptors in its School of Fine Arts, and for archaeologists, historians and students of literature in its School of Classical Studies. The latter was founded in 1895, and a union between the last two institutions was effected in 1912." Says Mr. LaFarge: "Although its two coordinate branches are called 'schools,' they are not schools in any commonly accepted sense. The Academy is not for teaching rudiments, it does not have classes, nor does it even impose a very rigid prescribed course. Its beneficiaries are those who have advanced far beyond the preliminary stages in their various callings. They come to Rome for enlargement and fuller development of their knowledge, and talents through first hand contact with the records of the past. What the Academy offers—its Prize of Rome—is not meant to be benevolent assistance to worthy youth, but the means whereby the best material discoverable may be raised to its highest powers for the elevation of American art and letters."

The Academy sends out Fellows annually and offers in addition the privilege of its facilities to the fellowship holders sent out from fifteen American universities and other educational institutions. Fellows are chosen in competitions held throughout America.

The American Academy in Rome is a national institution and it is erected upon the underlying conception of the value of and need for collaborative work among artists. Its students come from all parts of the United States, and they are thrown together in working out their problems—"not Fellowships only, but fellowship truly." It is most enlightening to note that the board of trustees of the Academy is composed of representatives of the provinces of architecture, sculpture, painting, archaeology, literature, and history. It is furthermore stipulated that three-fifths of the trustees must at all times be professionally engaged in their respective types of work and that the three major fine arts must always be represented by no less than two-thirds of the professional members of the board. Devoted experts thus control the destiny of the American Academy in Rome.

The exhibition just closed is an index of the Academy's success and usefulness and a sustained test of its policy of educational work. The entire collection of drawings, paintings, photographs, reliefs, figures, etc., are to be sent on tour throughout the country as one of its regular traveling exhibitions by the American Federation of Arts.

Officers of the American Academy in Rome:
William Rutherford Mead, President.
Breck Trowbridge, Vice-President.
C. Grant LaFarge, Secretary.
William A. Boring, Treasurer.

Trustees:
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Professor J. C. Egbert.
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H. Siddons Mowbray.
John B. Pine.
J. C. Rolfe.
Henry Walters.
Andrew F. West.

AN ITALIAN GARDEN

(Continued from page 4)

Recesses were made in the garden walks for marble seats, which were placed after the accompanying photographs were taken. The walks were made of crushed limestone.

The front of the place was treated in a simple manner with a broad expanse of velvety lawn and border plantations of low shrubbery along the north terrace walls, with hedges along the east, north and west property lines. No attempt was made to spot the lawn with exotic trees to distract the attention from the house or destroy the feeling of width and depth. Nor was any attempt made for color effect other than the varying shades of green.

Thus was a most restful setting secured, one that never tires. The formal garden is so well conceived from the passing public that it serves its true function as an outdoor living room, closely and intimately related to the privacy of the household and its guests, and many a pleasant function has been held within its boundaries.

No attempt was made to secure a riot of colors in the garden, but rather a quiet symphony of white, blue and green. Concealed lighting fixtures flood the garden at night with a soft glow of light that makes it a veritable fairyland. The high retaining walls shut out the west winds, and the sun tempers its rays on the cool expanse of green turf; tinkling fountains sing a song of sleepy pleasure that makes us linger with keen delight, and leave with a sigh of regret. Such a garden brings to its owner health, happiness and pleasure, and an inspiration for the finer things of life.
MINUTES OF THE 130TH MEETING OF MEMBERS

The one hundred and thirtieth regular meeting of the Southern California Chapter, A. I. A., was held at the City Club, Eighth and Broadway, Wednesday evening, November 12th.

The meeting was called to order at 7:00 p. m. by the president, J. E. Allison, A. B. Benton, S. O. Clements, A. M. Edelman, Lyman Farwell, R. G. Hubby, Myron Hunt, H. F. Withey, J. F. Krempel, S. E. Marston, Robert Orr, H. M. Patterson, Alfred W. Rea, A. Rosenberg, A. Wackerbarth.

As guest was present, Mr. John Bowler.

Minutes of the 129th meeting were read and, with one exception, were approved.

Under Committee Reports—Mr. Withey, for the City Planning Committee, stated that the City Planning Ordinance called for by the mayor had been prepared and was in the hands of the Welfare Committee, with action pending.

The secretary reported that the president had appointed a committee consisting of Albertson, Grey, Duques and Huph, to pass upon the house plans collected in a competition by the Los Angeles Ex-aminer. The committee had met, examined the drawings, and a report upon the same will be in the next Sunday issue of the paper.

The president called upon the Nominating Committee for its report. Mr. Myron Hunt, chairman, submitted the following nominations for the ensuing year:

President, G. E. Bergstrom; vice-president, H. F. Withey; secretary, R. G. Hubby; treasurer, A. Wackerbarth; member Executive Committee, A. M. Edelman.

It was moved, seconded, and duly passed that the report be received.

The president called upon Mr. Rosenheim, of the Special Commit tee, appointed at the last meeting, for a report. He offered a program for the Chapter's consideration, and various suggestions were made for the improvement of the program, it finally being moved by Mr. Baekus, seconded by Mr. Krempel, and carried, that the committee give the subject further consideration and report at the next meeting.

The following communications were read:

From the Chamber of Commerce, addressed to Mr. Patterson, president, stating that it was thought advisable by certain committees of the Chamber of Commerce that an Advisory Engineering Board be appointed to work in conjunction with the Manufacturers' Committee of the Industrial Departments of the Chamber of Commerce, with the purpose in view of supplying necessary engineering data to support a campaign for the development of metal and chemical industries, said board to be ready with technical advice on large problems constantly coming before the Chamber of Commerce.

It was suggested that the Chapter appoint two members to serve on this committee, and the president appointed Mr. Rosenheim and Mr. Myron Hunt to act in this capacity.

From William Stanley Parker, secretary of the Institute, advising the Chapter to support the work of the Art Service League. Letter was ordered filed.

From William Stanley Parker, a second letter, urging the Chapter to take an active interest in regulation, by state legislation, of the practice of Architecture. Letter was ordered filed.

From Mr. Sylvester Weaver, chairman of the Red Cross Roll Call Committee, urging that the Chapter members join the Red Cross. Mr. Patterson suggested that those willing to give their names to the secretary.

Under "Papers and Discussions" the program called for an address by Mr. John McGroarty, but for some unknown reason Mr. McGroarty was not present. Mr. Wackerbarth offered a paper describing the discovery of gold in California, which the secretary, being so requested, read before the meeting. Upon the close of this, there being no further business, the meeting adjourned at 9:50.

H. F. WITHEY, Secretary.

WASHINGTON STATE CHAPTER AMERICAN INSTITUTE OF ARCHITECTS

Minutes of 255th meeting held December 3, 1919, at 6:15 p. m., at the Blue Bird Cafe.

Present—Huntington (presiding), Albertson, Alden, Baeder, Bell, Borhek, Cote, Field, Gould, Ivey, Knox, Loveless, Myers, Storey, Ziegler.

Guest—Mr. Vegel.

The minutes of the meetings held November 5, 12, 19 and 25, were read and approved.

A circular from the American Civic Association requesting endorsement and co-operation in the effort to have Bill H. R. 7014, passed by Congress urging immediate action, was read. Mr. Loveless moved that the Chapter endorse the work and that the Chapter forward to the necessary parties notice of the action. Motion seconded.

Mr. Albertson spoke in favor of the bill, stating that all the information gathered by the U. S. Housing Corporation would thereby be made available for future use. Motion put and carried and secretary ordered to comply with motion.

Mr. Albertson, speaking for the Ordinance Committee, called attention to the failure of the city council to make the necessary revisions in the ordinances yearly, thereby letting the changes accumulate, and because the board of appeals did not put the required changes in form for adoption, and it was concurred in that the Ordinance Committee be empowered to do this yearly and present same to city council.

Mr. Alden, reporting for the committee in "Conduct of Building in the U. S. Army," read an exhaustive report which was adopted and ordered forwarded to the Institute urging action on its part in consonance with the report.

The Nominating Committee reported as follows:

"The Nominating Committee desires to report as follows: It has found it advisable to recommend one ticket and therefore only the following nominations are made:

President, A. H. Albertson; First Vice-President, Harlan Thomas; Second Vice-President, George Gove; Third Vice-President, L. L. Iland; Secretary, Carl Siebrand; Treasurer, S. F. Ford; Executive Committee, Harold Sexsmith.

Respectfully submitted,

W. R. WILCOX,
A. L. LOVELESS,
J. H. SCHACK,
G. C. FIELD,
S. D. FORD, Chairman.

Mr. Gould spoke to the subject of Small House Exhibit to be held in January under the auspices of the Fine Arts Society. Mr. Myers spoke at this point of the need of the Chapter holding a large exhibit some time in the spring. The proximity of two exhibits and the probable effect was then discussed. Mr. Myers finally moved that the Chapter members support and co-operate with the Fine Arts Society in an exhibit of Domestic Architecture in January by lending photographs, drawings, etc., for said exhibit. Motion carried.

Mr. Myers also moved that a large comprehensive exhibit be held under the Chapter auspices some time in March or April. Motion seconded and carried.

Mr. Cote, the speaker of the evening, was then called upon and, after being warmly received, recounted his experiences with the A. I. A. in France and the British Isles, including Scotland. He spoke upon the domestic and social life of the places visited, giving them much of the intimate and personal touch. His talk proved most interesting and at times highly amusing.

Mr. Loveless moved that the annual meeting be held January 10, 1919. Motion seconded and carried.

Meeting adjourned.
While there may be great beauty to a perfectly level garden, especially of the formal type, there is an element of picturesqueness introduced by the use of steps. Naturally this involves the arrangement of a garden on different levels, or the adaptation of a hillside to terrace treatment.

GARDEN ACCESSORIES

The charm of such a feature perhaps lies in the suggestion of separation, even of mystery; for although an open vista of different levels connected by flights of steps may be very lovely, still it lacks the human incentive of curiosity, an inspiration to one's imagination. A garden that invites and delights by degrees, without revealing all its attractions at once, may well be called an "enchanting" garden.

And the combination of gate with steps adds a hint of secrecy, of guardianship, like the key to the casket of jewels, which deserves consideration in studying what might be called the psychology of a garden.
GARDEN TERRACE
RESIDENCE OF J. H. MALLETT, CLAREMONT, CALIFORNIA
W. H. RATCLIFF, J., Architect

WELL OF POMPIAN STONE
ESTATE OF SIG. STERN, MENLO PARK, CALIFORNIA
THE days are growing perceptibly longer, the hills are turning green, and the warmth of the California sun, reigning unchallenged in the cloudless blue bowl overhead, brings again that temporary, tantalizing illusion that spring is already come. Later, we know, there will come days when the blustering winds of February and March will seek to chill our blood and drive us indoors again. But now, the call to outdoors that is so much of the spell of California is strong upon us; even on the city streets, where the flecks of confetti still clinging to grating and gutter tell how recently the New Year’s birthday was celebrated, there is a something in the air or in the blood, intangible but evident, which whispers of spring.

It is the first month of another year. And while we cannot, and would not, forget other years, what a relief it is to start something new, and fresh, and different! It is not strange that this January air, with its message of new life and new hope, goes to our heads like wine; surely the reviving wine that stimulates the flagging spirit and stiffens the spine and lifts the faltering courage. For, regardless of past errors and terrors, the way is ahead; we have had a breathing space to lick our sores, and they are not all healed yet, but the trail is blazed so clearly that all but the blind can see—or that sad company of delicts, lazy, crazy, stubborn, forlorn, who persist in looking backwards.

Though the direction is clear, the climb will not always be easy. There are some stiff places to get over, some we can see now and others that it is wise to foresee; and the weaker and wounded will have to be helped over by the stronger. But there will be resting places, stops for refreshment and recreation and for viewing the depths we have left and the heights ahead.

And recreation is one big vital necessity of this continuous struggle of ours that must not be neglected. It means so much more than just amusement; “re-creation” is what we are feeling these beautiful January days, and what indeed we all realize the need of, after our interval of breath-catching.

For real re-creation, too, we naturally and inevitably turn to Mother Earth. Some of us ride, some walk, some run or leap; mentally and bodily we seek re-freshment and new energy. Many of us dig. That old, new miracle of seed and flower and fruit—what joy and satisfaction it brings! The abundance of the earth—how it adds to the happiness of a home!

As we start our new year, then, let us not overlook in our plans for progress this co-operation with Nature. It is worth while allotting some of our time to this side of our life. And as the wise man learns from the experience of others, it is well to take a comprehensive view occasionally of our neighbors’ gardens and courts and gateways, to see what value of rest and pleasure and return to tired minds and bodies this cultivation of Nature makes possible.
RESIDENCE OF W. J. MacDONALD, PASADENA
REGINALD D. JOHNSON, Architect
THE LORING RESIDENCE, PASADENA
MYRON HUNT, Architect

RESIDENCE OF MRS. B. C. KECK, PASADENA
REGINALD D. JOHNSON, Architect
COUNTRY HOME OF CHESTER THORNE, TACOMA
CUTTER & MALMgren, Architects
RESIDENCE OF DR. A. J. BOUFFLEUR, SEATTLE, WASHINGTON
W. M. SOMERVELL, Architect

SUNKEN GARDEN, ESTATE OF MR. SCHIFFMAN, PASADENA
BARD RESIDENCE, HUENEME, CALIFORNIA
MYRON HUNT, Architect

ROOF GARDEN AND POOL
MORSHEAD APARTMENTS, SAN FRANCISCO
BROUGHTON SAWYER, Architect
RESIDENCE OF MISS MARY PHELAN, SAN FRANCISCO
CHARLES PETER WEEKS, Architect

HOUSE FOR J. W. BURNS, PASADENA
MYRON HUNT & ELMER GREY, Architects
HOMEWOOD HOUSE, CUFFLEY, HERTS, ENGLAND
ALLEN & THOMPSON, Architects

RESIDENCE ON ESTATE OF GEORGE LENT, REDWOOD CITY
BAREWEWELL & BROWN, Architects
RESIDENCE OF CHARLES W. BROCK, THOUSAND OAKS, BERKELEY
HENRY H. GUTTERSON, Architect

HOUSE FOR MRS. R. W. RIVES, MONTECITO, CALIFORNIA
REGINALD D. JOHNSON, Architect
RESIDENCE OF DR. GUY COCHRAN, LOS ANGELES
MIRRON HUNT & ELMER GREY. Architects

HOUSE FOR ELMER GREY, PASADENA
ELMER GREY. Architect
RESIDENCE OF MISS C. A. CULBERTSON, PASADENA
GREENE & GREENE, Architects

SIDE VIEW FROM GARDEN
RESIDENCE OF DR. GUY COCHRAN, LOS ANGELES
MYRON HUNT & ELMER GREY, Architects
GENERAL VIEW

LOUNGING ROOM

SALT LAKE CITY SIGMA CHI CHAPTER HOUSE

SCOTT & WELCH, Architects
GENERAL VIEW

MAIN ENTRANCE
HIGH SCHOOL, WATSONVILLE, CALIFORNIA
W. H. WEEKS, Architect
Scattered through California are many houses, for the most part of modest size and of the bungalow type, whose designs at first glance appear to be inspired or influenced by Japanese art. Whether this is consciously true is not specially important; the fact remains that a note which is far from unpleasing, and which is not apt to become common, has been introduced into our residence architecture.

These houses, or at least the better examples of them, are distinguished by several points characteristic of the Japanese. A simplicity and harmony of line, almost amounting to severity; a picturesqueness of mass and feature; and a scrupulous attention to detail, suggestive of the medieval days of handcraft, stand out among these characteristics.

The tendency in this latter case to "feature" obvious hand-work has gone beyond the danger line in some instances and the result is clumsy and forced. However, it is only fair to say that such evidences are undoubtedly to be found almost entirely in the work of untrained imitators of the pioneers in this style.

Another point worth noting is the consistent use of native materials, and the structural sincerity evidenced. Here again, when sincerity is carried too far, it becomes not only awkward, but really insincere. And the use of members several times larger than needed for any possible strain naturally results in many examples of "faking" in attempts to reproduce a style without cost or conscience.

The illustrations here given are well studied, consistent compositions, both inherently and in relation to their environments, and deserve recommendation for much of merit and interest.
THE TREES "COMPOSE" AS THOUGH THEY HAD BEEN PLANTED PURPOSELY—BUT IT WAS REALLY THE HOUSE BUILT TO FIT THE TREES

A COURT THAT IS RECTANGULAR AND SEVERELY FORMAL—BUT ITS GOOD PROPORTIONS AND THE JUDICIOUS USE OF FOLIAGE TO ACCENT THE DESIGN HAVE PRODUCED A SUCCESSFUL AND CHARming COMPOSITION
THE LONG LINES OF ROOF AND WALL ARE RESTFUL AND HARMONIOUS
WALKER & VAWTEN, Architects

THE SUGGESTION OF HANDCRAFT IS STRONG IN THIS CHARACTERISTIC ENTRANCE OF THE HOUSE ABOVE
INTERIOR DECORATION

EXAMPLES OF THE LIGHT-COLORED WALL AND WOOD-WORK, SHOWING ITS VALUE BOTH AS AN EFFECTIVE BACKGROUND FOR FINE FURNISHINGS, AND AS A MEANS OF CREATING THE EFFECT OF SPACIOUSNESS

MANTEL IN THE CAME ROOM
WOMAN'S CLUB, SAN FRANCISCO
BLISS & FAVILLE, Architects
RESIDENCE OF C. F. PERRY, HOLLYWOOD, CALIFORNIA
B. COOPER CORBETT, Architect

RESIDENCE OF J. ARNOT RATHBONE, ELMIRA, N. Y.
CONSIDINE & HASKELL, Architects
The CONTRACTOR
HOW COSTS ARE KEPT UNDER THE COST-PLUS-FIXED-FEE CONTRACT

By F. A. WELLS

No contractor who values his capital can afford to do without adequate cost records, both as a check on the job in progress and as a basis for future estimating. Yet the simpler that system of accounting the better, and any refinements further than those necessary to give the actual required data are a waste of time and money. Some contractors keep their books under their hats or in the left-hand pocket of their coats, where all invoices go preparatory to paying. At the opposite extreme are firms who maintain a complicated system of accounts, both at the job and at the home office. Accounting methods sufficient for the lump-sum contract may be insufficient for the cost-plus-fixed-fee contract, under which the owner and architect must have access to the accounts at all times.

The system we are now using is briefly the keeping of:
1. Cashbook, Voucher Record, and Ledger, combined;
2. Invoice and Payroll Register, combined;
3. Detail Cost Record;
4. Accounts Payable Record (Vendors' Accts.).

1. The Cashbook, Voucher Record and Ledger is used for the recording of all cash received, cash disbursed by vouchers and all journal entries.

2. The Invoice and Payroll Register is used for the recording of all invoices and payrolls. The invoices and payrolls are numbered consecutively. This Register has columns for date, invoice number, vendor's name, total amounts, both debit and credit, and individual columns for the main accounts used in distribution of costs. The Register represents an absolute detail control of all approved charges to the job, as only audited and approved items are given a register number or entered. The payrolls are given register numbers and approved the same as invoices. The office copies of all invoices are filed in numerical order in an ordinary letter-file drawer, and bound in numerical order, in lots of 50 to 100, using an ordinary heavy file folder for cover, clamping the invoice to the folder.

3. The Detail Cost Record is used for the recording in detail the distribution of costs among the main accounts as shown on Invoice Register.

4. The Accounts Payable (or Vendors' Accts.) Record is used for the recording of all invoices from vendors. After the invoices have been entered in the Invoice Register and Detail Cost Record Book, they are entered as a credit to vendor in Accounts Payable. Each vendor has a separate page or sheet. After entry is made, it is placed in file under vendor's name until ready for payment. When payment is made same is vouchered and charged to accounts payable (Vendors' Acc't.) and cash credited.

OFFICE ROUTINE OF PURCHASE ORDER, INVOICES AND VOUCHER

Issuance of Purchase Order—In Quadruplicate

The original of order is sent to vendor, the duplicate is filed numerically (which forms order register), triplicate is filed in Open Order File—(Vendor's Name Order), quadruplicate—(which forms material receipt or tally sheet) is filed by the office material clerk awaiting receipt of material.

Receipt of Material

Upon receipt of materials, the office material clerk checks and signs the material receipt portion of the order and file completely with supporting delivery tickets, etc., awaiting invoices.

Checking and Auditing Invoices

Invoice upon receipt is checked against material receipt or tally sheet for receipt of material. Extensions, prices and footings are checked and certified. Cost distribution is checked and entered. Invoice is then audited for discount and cost distribution and certified. Invoice then passes to the superintendent for his approval and the approval of the owner's representative.

Entry of Approved Invoices in Invoice Register and Vendor's Acct.

Upon return of approved invoice from the superintendent, the bookkeeper gives the invoice numerical register number and enters in the Invoice Register. Only fully approved invoices are given register number. Invoice is then posted to the credit of the vendor in Accounts Payable account and a charge to the Detail Cost Record.

Journalizing Accumulated Totals of Invoices Registered to Ledger

Accumulated totals in the Invoice Register are journalized in the Ledger (which is also the voucher record) at daily, weekly or semi-monthly periods as is found practical.

Voucher Check

We have found the voucher check system to be the most convenient. The voucher is made in quadruplicate at the construction office on the job and the approval of the owner's representative is often indicated on all copies of the voucher. The check, or original voucher, goes to the vendor, the duplicate to our general office for our records, the triplicate is kept as the job record and the quadruplicate is the "Owner's Copy," which is forwarded to the vendor with original to be receipted by him and returned. At intervals we furnish the owner with statement showing vouchers paid and receipted vouchers attached.

Since the major purpose of cost accounting is to give an adequate basis for future estimating, it is important that so far as practicable the form of cost accounting shall follow the form of estimate. This is not practicable to the last subdivision of each of our general accounts, but sufficient to permit intelligent use of all cost figures. With such figures it is possible to compare not only final costs, but costs at any stage of the job, with the original estimated cost for that portion of the contract. We frequently divide our estimate by floors, in the case of a many-storied building, in order to have a check upon quantities and upon expenditure at several stages of the work.

DISTRIBUTION OF ACCOUNTS

We use the decimal system of classification of accounts. The classifications number 100 to 600 inclusive, and 700 and 800 numbers are for our general books which embrace the assets and liabilities, revenues and income accounts. We will omit these in our discussion of cost accounting in connection with Cost-Plus and Fixed-fee contracts.

The general distribution is under the following headings:

- 700 and 800 Construction Costs—(Summary of General Headings).
- 710 Excavation
- 720 Caissons
- 730 Footings
- 740 Trench and Wall
- 750 Concrete and Fireproofing
- 760 Masonry
- 770 Carpentry
- 780
- 790
- 800 Plant Expense

810 Field Overhead
820 Extra Work
830 Subcontracts
840 (Subcontract) Extra Work
850
860
870 Repair Contracts
880
890 Company Expense (Not chargeable to owner)

The sub-divisions of headings 710-790 are between the items labor (1), material (2), and liability insurance (3). Thus labor in excavation would be 711, material in excavation 712, and liability insurance in excavation 713.

A further division of the various kinds of labor and materials is made. The following classifications illustrate this point:

Labor—711

711.01 Digging (General)
711.02 Digging Subbasement
711.03 Sheetin and shuttering
711.04 Shoring adjacent building

Material—712

712.01 Lumber
712.02 Underpinning adjacent building
712.03 Building (steel)
712.04 Cement

Liability Insurance—713
THE BUILDING REVIEW

1. Cash Book Voucher Record Journal Ledger

2. INVOICE REGISTER
   FOR American National Bank YEAR 1917

3. ACCOUNT
   FOR American National Bank YEAR 1917

4. Cash Payments Register
For convenience we have listed the charges of labor and material in the order they usually appear in building construction costs:

<table>
<thead>
<tr>
<th>Labor</th>
<th>01 Digging (General)</th>
<th>.60 Clean Up Rubbish</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>02 Digging Subbasement</td>
<td>Add as many new accounts as are needed</td>
</tr>
<tr>
<td></td>
<td>03 Sheet and Braiding Banks</td>
<td>Material</td>
</tr>
<tr>
<td></td>
<td>04 Shoring Adj. Buildings</td>
<td>.01 Lumber</td>
</tr>
<tr>
<td></td>
<td>05 Underpinning Adj. Bldg.</td>
<td>.02 Underpinning Adj. Bldg.</td>
</tr>
<tr>
<td></td>
<td>06 Pumping</td>
<td>.03 Rings (steel)</td>
</tr>
<tr>
<td></td>
<td>07 Back-filling and Grading</td>
<td>.04 Cement</td>
</tr>
<tr>
<td></td>
<td>08 Cutting Old Footings</td>
<td>.05 Sand</td>
</tr>
<tr>
<td></td>
<td>09</td>
<td>.06 Stone</td>
</tr>
<tr>
<td></td>
<td>10 Placing Lagging and Rings</td>
<td>.07 Brick</td>
</tr>
<tr>
<td></td>
<td>11 Ventilating</td>
<td>.08 Wall Tie and Inserts</td>
</tr>
<tr>
<td></td>
<td>12 Mixing and Placing Concrete</td>
<td>.09 Steel (structural)</td>
</tr>
<tr>
<td></td>
<td>13 Build. Forms, General</td>
<td>.10 Steel (reinforcing)</td>
</tr>
<tr>
<td></td>
<td>14 Build. Forms, Exterior Columns</td>
<td>.11 Nails and Wire</td>
</tr>
</tbody>
</table>
|       | 15 Build. Forms, Interior Columns | .12 Clamps, Purchased or Rent-
|       | 16 Build. Forms, Spandrels | ed |
|       | 23 Lay Brick | .13 Tile |
|       | 25 Bend Steel | .14 Protection (Lumber, etc.) |
|       | 35 Set Cut Stone | .15 Terra Cotta |
|       | 44 Fit and Hang Doors | .16 Granite |
|       | 56 Unload and Handle Material, etc. | .25 Frames and Sash |
|       | | .30 Interior Trim |
|       | | .35 Coping |

Should charges be made in connection with concrete and fireproofing under subdivision 750, they would follow the same order as in excavation:

| 751.12 (Labor)—Mixing and Placing Concrete | |
| 752.04 (Material)—Cement | |
| 753 Liability Insurance | |
| Or, Carpentry—Subdivision 770. | |
| 771.44 (Labor)—Fit and Hang Doors | |
| 772.25 (Material)—Frames and Sash | |
| 773 Liability Insurance | |

CLASSIFICATION OF PLANT EXPENSE

Subdivision 800 covers plant expense and conforms with the sub-classification of the 700 accounts as much as practicable.

The following are the headings under 800:

| 801 Excavation | 801.31 Labor |
| 802 Caissons | 801.32 Material |
| 803 Footings | 801.4 Rental of Equipment |
| 804 Sawmill | 801.5 Fuel, Lubricants and Power |
| 805 Concrete and Fireproofing | 801.21 Labor |
| 806 Masonry | 801.22 Material |
| 807 | 801.6 Repairs |
| 808 | 801.7 |

A further typical subdivision of the accounts under this heading is:

| 801.1 Transportation (of Equipment Plant) | 801.3 Equipment on Charge and Credit Basis |
| 801.2 Erection of Equipment | 801.1 Labor |
| 801.4 Rental of Equipment | 801.32 Material |
| 801.5 Fuel, Lubricants and Power | 801.22 Material |
| 801.6 Repairs | 801.7 |

Should charges to plant in connection with concrete and fireproofing be made, they would be charged as 805 with divisions shown above.

FIELD OVERHEAD

| 811 Salaries, General Labor and Expense | .5 |
| 811.1 Supt. and Engineers | .6 |
| 811.2 Office Employees | .7 |
| 811.3 Materialmen and Timekeepers | .8 |
| 811.4 Laying Out Building | .9 |
| 811.5 Watchman | .10 |
| 811.6 Waterboys | .11 |
| 811.7 Toolmen | .12 |
| 811.8 Lia. Ins., Supt. and Watchman | .13 |
| 811.9 Trav. Exp., Supt., Engr. and Office Men | .14 |
| 812 Engineering Expense | .5 |
| 812.1 Plans, Detail and Eng. Supplies | .6 |
| 812.2 Photographs | .7 |
| 812.3 Engineering Service | .8 |
| 812.4 Architect’s Fees | .9 |

813 Office Expense

| 813.1 Rent, Light and Heat | .1 |
| 813.2 Stationery and Printing | .2 |
| 813.3 Telephone | .3 |
| 813.4 Telegraph | .4 |
| 813.5 Postage and Expressage | .5 |
| 813.6 Rent on Adding Machine and Typewriters | .6 |
| 813.7 Furniture | .7 |
| 813.8 Miscellaneous | .8 |
| 813.9 Misc. Off. Expense, Towels, etc. | .9 |

814 Other Fixed Field Expenses

| 814.1 Bovis (Maintenance and Construction) | .2 |
| 814.2 Permits and Licenses, Boiler Inspection | .3 |
| 814.3 Fire Insurance | .4 |
| 814.4 Legal Services | .5 |
| 814.5 Burglar Insurance | .6 |
| 814.6 Association Dues | .7 |
| 814.7 Advertisements | .8 |
| 814.8 Floor Tests | .9 |
| 814.9 Ring Tests | .10 |

815 Temporary Structures (Labor and Material)

| 815.1 Offices | .1 |
| 815.2 Toilets | .2 |
| 815.3 Toolhouse, Blacksmith Shops, Storage Sheds, etc. | .3 |
| 815.4 Stairs and Ladders | .4 |
| 815.5 Fences, Sidewalks, Covers and Other Enclosures | .5 |
| 815.6 Temporary Platform and Driveways | .6 |
| 815.7 | .7 |
| 815.8 Repairs and Protection to Adjacent Property | .8 |
| 815.9 Protection to Pub. Utilities | .9 |

817 Temporary Light, Heat and Power

| 817.1 Light | .1 |
| 817.2 Heat | .2 |
| 817.3 Power | .3 |
| 817.4 | .4 |
| 817.5 | .5 |

819 General Cleaning

| 819.1 Labor | .1 |
| 819.2 Teaming | .2 |
| 819.3 | .3 |
| 819.4 | .4 |
| 819.5 | .5 |

820 Extra Work

| 820.1 Use as many numbers as accounts charged. | .2 |
| 820.2 Subcontracts | .3 |
| 820.3 Wrecking, Excavating, Shoring, etc. | .4 |
| 820.4 Wrecking—Contract | .5 |
| 820.5 Excavation Contract | .6 |
| 820.6 Shoring Contract | .7 |

822 Heating, Plumbing, Wiring, Elevators, etc.

| 822.1 Subheading for each kind of sub-contract. | .8 |
| 822.2 Interior Construction | .9 |
| 822.3 Painting and Glazing | .10 |
| 822.4 Millwork | .11 |
| 822.5 Roofing | .12 |
| 822.6 Fireproof Doors and Windows | .13 |
| 822.7 Interior Finish | .14 |
| 822.8 Structural Steel | .15 |
| 822.9 (Extra Work)—Subcontracts | .16 |

841 Subheading for each kind of work done.

850

860

870 Repair Contracts (for small Jobbing Contracts)

890 Company Expense (not charged to owners)

891 Subheadings for each kind of expense.
DETAILED STATEMENT OF CONSTRUCTION COST

At stated periods we take from the cost records a summary and detail statement of construction costs in the following form:

Acct. No., Name of Acct., Item, Amt., Cost per Unit, Est. Cost, Diff.

The last column is in black or red. Naturally the red items will have careful scrutiny to ascertain why costs are running above estimate. This statement is primarily for our own use, but the owner may have a copy if he wishes.

Under the cost-plus-fixed-fee contract the owner generally furnishes the funds to finance the contract. We maintain an entirely separate bank account for each cost-plus contract representing the owner's funds, and where agreeable to the owner, we arrange for the owner's representative to countersign all checks drawn by us in this account. At the start of the work we furnish an estimate of the anticipated amount of labor and material bills covering an initial period of two weeks or more to the owner, who then advances the funds to cover these requirements. When the owner's receipted copies of vouchers covering this period are returned from the vendors, a statement is given to the owner showing amounts actually paid for payrolls, materials, and sub-contract work, with receipted vouchers attached. That total is then credited to us by the owner on account of contract.

The advantage of having all accounts handled at the job are apparent. The distribution, if not clear from the purchase order, can be referred to the superintendent and the fact that the books of accounts are open at all times for the owner's inspection, is an assurance of honest treatment. The fact that the owner approves purchases of materials before made and again has the opportunity of questioning invoices prior to payment, leaves the control with him and prevents the accumulation of minor, disputed items, which if left for settlement until the completion of the contract, might not be readily explained.

But a system of accounts, no matter how perfect, cannot influence the cost of work except as it points out from time to time divergence from the preliminary estimate unless such differences are promptly taken in hand, the reasons investigated and the remedy applied. The success of work under the cost-plus contract is still dependent upon the integrity of the contractor and his ability to perform.

ONE WAY OF GETTING RESULTS

In the system that our organization has developed, materials and labor are estimated under fixed general divisions and their subdivisions. Reference is made, of course, to our cost records on previous jobs, and an excellent idea is obtained of both the amounts to be charged against various parts of the work and of the time required for its completion.

Then during the progress of the work costs are kept according to the same schedule of items as was used in making up the estimate. A schedule has been prepared which first lists the general headings, with their divisions, and then states briefly the nature of the items that are to be charged under each. Copies of this cost distribution schedule are placed in the hands of the superintendent in each job, with the necessary forms for keeping an accurate and complete set of costs. Unnecessary refinement is eliminated, but some detail is necessary in order that the desired figures may be secured.

At the completion of the job, comparison is made between the estimated and the actual costs, and the superintendent is paid a bonus in proportion to the savings he has made. He in turn shares his bonus with the various foremen working under him, on a predetermined basis. At the beginning of the job each foreman is given an estimate of the labor cost, only, on the work that will fall to his men, so that he can always tell whether the work is being done within the estimate, and yet he does not have details as to the total cost of each part of the job.

The bonus is made a liberal one so that a strong inducement is offered to those in direct charge of operations to put forth every effort in securing a good output from the workmen and in developing more efficient methods. The success of such a bonus system hinges upon adherence to fair standards when the estimates are prepared, so that under careful supervision savings worth while can be made."—(The Bulletin.)

There is a suggestion of the jewel-like setting of the Taj Mahal in this California garden—the "mirrored magic" of these long, narrow lily pools with dark border of box and cedar.

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Chas. A. Platt, Architect

Cover—Pool at Faulkner Farm

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Highland Hospital of Alameda County, California

ARCHITECT
John Reid, Jr.
Henry H. Meyers

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The Highland Hospital of Alameda County, California
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ARCHITECTURE IN THE UNITED STATES ONE HUNDRED YEARS AGO

By HARRIS ALLEN

IN 1833 there was published in Massachusetts a book entitled "Practice of Architecture," by Asher Benjamin, architect, author of "The American Builders' Companion," "The Rudiments of Architecture," and "The Practical House Carpenter." This book was intended for the use of "Carpenters and Practical Men," and was undoubtedly the inspiration and guide to much of the delightful work of those days, in which New England abounds, and for which a belated appreciation has steadily increased.

Couched in quaint terms, but clear and logical, the refined taste and common sense of this veteran architect and builder, whose experience of many years' study and practice illuminates his pages, are well worth our interested attention. He deals with practical geometry and carpentry, with the five orders and an additional column and entablature of his own assembling, with mouldings, details and ornaments. His object is best expressed in his own preface:

"I have endeavored, in this treatise, to avoid a defect which is very generally complained of in books of this kind: that is, want of a particularity in the details, and of a clear, simple explanation of them. In cities, where architects are always at hand, this deficiency is not so much felt, since the carpenters there stand in need of no further knowledge upon the subject than such as may enable them to put into practice the drawings furnished by the architect. But, in villages, the case is different. Those carpenters in country villages who aspire to eminence in their business, having no architect to consult, are under the necessity of studying the science thoroughly and without a master. To them, therefore, is this book peculiarly adapted; for it contains the principles of many expensive folios, condensed into a narrow space and applied to modern practice.

"The time has been, within my own recollection, when New England did not contain a single proficient architect. The first individual who laid claim to that character was Charles Bulfinch, Esq., of this city, to whose classical taste we are indebted for many fine buildings. The construction of the Franklin Street houses, of which that gentleman was the architect, gave the first impulse to good taste; and architecture in this part of the country has advanced with an accelerated progress ever since. But though architecture has certainly improved, and rapidly too, within late years, a large proportion of the vast number of buildings which meet the eye, of all classes and sizes, and constructed for all purposes, are totally destitute of architectural taste. This defect does not arise from parsimony, for it is not uncommon to see buildings of large dimensions burdened with a profusion of expensive and misplaced finery, which forms anything but ornament. Buildings of this class, which under skilful hands might have become proud monuments of public taste, are mortifying and repulsive objects to those who take an interest in the science of architecture.

"It has been too prevalent a habit, among those who would not think themselves capable of instructing a carpenter in the art of planing or sawing boards, or a bricklayer in laying bricks, to undertake the much more difficult task of becoming their own architect. The consequence is that such persons proceed to build without any fixed system; unlooked-for difficulties are soon encountered, which lead to expensive alterations, and the harmony of the building is destroyed. Nor is this evil confined to private buildings. The committee selected to superintend our public edifices are apt to cramp the invention of the architect by their economy, or pervert it by their fancies, so that specimens of the taste of some member of the committee can usually be discerned by a skilful eye, among our most scientific compositions. But the evil is certainly decreasing. Knowledge of the science is rapidly gaining ground, and the increased attention attracted towards the subject disposes those who have not the necessary information to confide in those who have.

"The principles and practice of the science are developed in the following pages, in a detailed and systematic manner. The text is taken from the Grecian system, which is now universally adopted by the first professors of the art, both in Europe and America; and whose economical plan, and plain massive features, are peculiarly adapted to the republican habits of this country.

"I have given examples of each of the five orders of architecture; first in the usual way, then repeating their details upon a large scale. There are likewise added a column and entablature, selected from the Grecian antiquities, and standing, with regard to expense, between the Tuscan and Doric orders.

"I have also given six samples of frontispieces and porticos, with their details drawn on a large scale.

"To these are subjoined explanations and practical observations on their proportions and adaptation to the buildings in which they are to be used: also, a variety of examples of cornices, for both external and internal finishings and of architraves and base mouldings, accurately drawn one-half of the full size for practice, and accompanied with practical observations on their size and fitness; examples of doors, windows, and their decorations; ornamental mouldings, stairs, and carpentry; together with all the elements of architecture which are necessary
THE BUILDING REVIEW

"A COLUMN AND ENTABLATURE"

to supply the wants of the practical builder. To these are added a complete drawing of a church, with all its details laid down in imitation of working drawings, with suitable explanations."

His comment on the use of mouldings might well be put on the wall of any drafting room:

"Mouldings, judiciously intermixed with plain surfaces, such as fillets, facies, coronas, etc., are the elements to which architecture is indebted for its most splendid productions. It is on the size, shape and fitness of these details, together with that of the plain surfaces which serve to divide and enrich them, that the beauty or deformity of every production, composed of these elements, depends.

"Anyone who is desirous of making himself a judge of these details must study the outline separately and critically, when affected by shadow, and when by reflecting light. After he has accustomed his eye to discern and retain the beauties and fitness of each for all the different situations in which he may wish to employ them, he will then as faithfully study the size, shape and fitness of all plain surfaces by which the mouldings may be separated and adorned. After this, he must study them collectively, by frequently drawing and intermixing their details; and he will thus be able to discern the good and bad effects of his composition, and improve his taste. Every composition is not only dependent upon the outline of its details but upon the proportion which the size of one bears to that of another and to the whole, and upon its adaptation to its intended place."

The major portion of the book deals with the orders, and there is much quotable material. His preliminary remarks lead one to believe that the carpenters of that time were supposed to know much besides carpentry: "Each of these orders presents a distinct type or mode of building, having a character peculiar to itself. The orders are the alphabet of the art; and to them and their elements, altered, varied and arranged in a thousand different ways, we are to look for the most splendid productions of architecture. A thorough knowledge of these orders, and of all their constituent parts, is therefore necessary for the composition of any architectural subject.

"Of these orders, the Doric, Ionic, and Corinthian are of Grecian origin. They exhibit three distinct and essential qualities in architecture—strength, grace, and richness.

"The Tuscan and Composite orders are of Roman origin. The former appears to have been invented for the purpose of exhibiting strength and rustic simplicity, while elegance and profusion appear to have been the object of the latter.

"By whom these orders were first invented, or at what time their improvement was advanced to the state in which they are to be found in the structures and fragments of antiquity cannot now be ascertained. We know nothing of their origin except what is related to us by Vitruvius, a writer whose correctness in many parts is much questioned. He is the only author upon architecture of the Augustan age, or for many ages afterward, whose works have come down to us. His writings are justly held in great estimation. It must be confessed, however, that his account of the origin of the orders has more the air of a fable than of an historical fact. Vitruvius informs us that 'Dorus, the son of Helen, and the nymph Opticus, who governed Achaia and the whole of the Peloponnesus, in some period of his reign, dedicated a temple to Juno in the ancient city of Argos. The order of architecture employed in this sacred edifice, which from its founder was termed Doric, was afterward adopted by the cities of Achaia, although no certain principles had yet been established by which its proportions might be regulated. In a subsequent era the Athenians, in conformity with the response of the Delphic oracle, by the general consent of the States of Greece, sent thirteen colonies into Asia, each conducted by an experienced leader, and invested Ion, son of Xuthus and Creusa, whom Apollo, by his priestess, acknowledged as his offspring, with the supreme command. He led them into Asia and possessed himself of the territories of the Carians. After the expulsion of the Carians and the Leleges, the new acquisition was called Ionia, from the name of the chief of the colonists, and temples were erected to the deities of the Grecian mythology, the order of architecture of which was similar to that observed in the sacred buildings of Achaia, and called the Doric, from having originated in the Dorian cities. The Temple of Apollo Panionius was the first they constructed in this manner. Desirous of adorning this temple with columns, but unpracticed in the rules of proportion, they were led to consider the proportions of the human frame, expecting principles to result from them by the adoption of which the great objects of strength and beauty would be obtained. Finding that the foot was a sixth of the height of the whole statue, they instituted the same proportions in their columns, whose height, including the capital, they made equal to six times the diameter of the shaft at the base. Thus the Doric column, formed according to the proportions of the human figure, and emblematical of manly strength and beauty, was first introduced in the temples of Ionia. In later times, however, when it was in contemplation to
consecrate a temple to Diana, they sought to introduce a new order of columns by giving to them the proportions of the female form; and that they might be emblematical of feminine delicacy, the height of the columns was made eight times the lower diameter. Bases were also given to them in imitation of sandals, and volutes were sculptured in allusion to the ringlets which fell down on either side of the face. The cymatia and encarpis in front were intended to resemble the hair as it was then worn, and the shaft was channeled in such a manner as to bear some resemblance to the folds of the matronly garment.

"Thus the invention of two different orders arose; one exhibiting the boldness and simplicity of the masculine figure, and the other the more finished form of a woman, attired and richly decorated. Later ages, however, advancing in refinement and judgment, sought to give greater beauties to both by making the Doric column seven times its diameter at the base of the shaft, and the Ionic nine times its lower diameter. The order, whose use was adopted first by the Ionian colonies, was called the Ionic.

"The third order, which is named Corinthian, derives its symmetry from an intention to make the form of the column accord with the more delicate proportions of the maiden figure; for at that early period of life the limbs are less robust and the figure admits of a greater display of ornament. The invention of the capital is said to owe its origin to the following circumstance: A virgin of Corinth, just as she had attained to a marriageable age, was attacked by a disorder whose effects proved fatal. After her internment, the vases, the objects of her admiration when alive, were collected by her nurse and deposited in a basket, which she placed upon her grave, after covering it with a tile to protect it from the weather. The basket was accidentally placed over the roots of an acanthus. The natural growth of the plant being impeded by the pressure upon it, the middle leaf and the cauliculi appeared in the spring around the bottom of the basket. The cauliculi, attaching themselves to the external surface, grew upwards, until their progress was arrested by the angles of the tile projecting over the basket, which caused them to incline forward and assume a spiral form. At this stage of its growth, Callimachus, who, from his great genius and talent for sculpture, was called Cata-technos by the Athenians, chancing to pass by the spot, observed the basket and the beauty of the young foliage around it. Pleased with its novel and fanciful appearance, he adopted it in the columns which he afterwards employed in the edifices of Corinth, having first instituted laws for the proportions of the order, which was thence termed Corinthian."

"In both Greece and Rome many ancient examples have been discovered which have been accurately measured and transmitted to us. We have therefore an opportunity of critically examining all the various examples, and of deliberately deciding what parts it will be wise to imitate and what to reject.

"It is, however, to be remembered that all the ancient Grecian examples within our knowledge were employed to adorn edifices erected for public purposes, which were mostly of an enormous size and of such a construction as to require columns very large and thickly set. It will, therefore, be highly proper in us to take into consideration the uses to which these elegant temples were applied, their size, their construction and their decorations, and compare them with our times, our customs and our wants, and then to imitate in the whole or in part any of these examples, with such alterations and adaptations as will render them conformable to our purposes."

He defends the Tuscan order, while admitting the superiority of columns to entablature: "Some architec-tes are unwilling to allow this column and entablature the honor of being ranked as one of the orders of architecture. They say, 'It is nothing more than the Doric deprived of the mutules and triglyphs, and a diameter or two added to the height of the column.' I cannot perceive the justness of these remarks. If any one of the orders is to be altered into the Tuscan, the Ionic would certainly be more suitable for that purpose than the Doric. Change its capital and base for those of the Tuscan, leave off the flutings on the shaft of the column and deprive it of a diameter or two in height, and the change is complete.

"In the examples of this order, as here exhibited, the column is seven diameters in height, including the capital. This seems to have been the universal standard of its height, from the time of Vitruvius down to the present. Nevertheless, during a long course of practice, it is probable that in half of the instances where I have had occasion to draw either of the orders I have found the established proportions ill suited to my purpose. Many circumstances render different proportions both proper and necessary. The proportions, in fact, depend upon the judgment. He who takes the most comprehensive view of all the circumstances of the case and governs his judgment by the simple and undeviating rule of proportioning the means to the end, will generally be the most successful.

"Take the case of a Venetian entrance recessed into a dwelling-house, embellished by two columns, and two
antae, their front line corresponding to that of the front of the building. The whole front above and directly over the entablature apparently depends on the two columns for support. Under such circumstances, anyone who should fail to make a column nearly or quite a diameter less in height than he would if the columns projected and were completely insulated from the front line of the building and had nothing but their entablatures to support, would soon be convinced of the error in his judgment. When columns are to be erected, consider for what end they are to be made: if for the support of any great height, then make them of a size sufficient to answer that end; if for ornament only, and not for the support of any great burden, construct them accordingly.”

Here is a typical excerpt from his discussion of the Doric order:

“Sir William Chambers and some other modern architects have proportioned the entablature by the height of the column, and not by its thickness, making it one-fourth of that height. This practice should not be imitated. A Doric column, one foot in diameter, would be eight feet in height. The above rule would give one-fourth of this height, or two feet, to the height of the entablature. But a Corinthian column, one foot in diameter, would be ten feet in height; and therefore the same rule would make the height of the entablature two feet six inches. Now it will be readily admitted that the Doric column, of one foot in diameter and eight feet in height, is capable of sustaining a greater weight than the Corinthian column of the same diameter and ten feet in height. This rule is therefore defective; because the Corinthian column would not be capable of sustaining so heavy a weight as the Doric, at the same time that it would be loaded with an entablature one-fifth higher than that of the Doric. On the authority of Vitruvius, we suppose that the proportions of the Doric order were taken from those of a robust man, and of the Corinthian from those of a young female; and it appears inconsistent to load the latter, therefore, with a greater burden than the former.”

After describing the Roman style of entasis, he states his preference:

“This method of diminishing columns is introduced here because custom seems to require it, and not as a recommendation for its use. I do not know of any situation where the Grecian system is not decidedly preferable. It is said that the shafts of columns were at first made of trunks of trees, and afterwards in imitation of them. But although the trunk of a tree diminishes upwards, yet the lines of its sides are straight, or nearly so; so that the Grecian architects showed their wisdom in closely adhering to this natural and graceful form. It is well known that a column whose sides are in straight line will appear as though its sides were gently curved inwards, for which cause the Grecian architects undoubtedly made the sides of their columns to swell gently outwards, with the intention that they should appear to be straight to the eye. This practise should be imitated.”

The model which he illustrates for the Ionic order is frankly a composite. As he explains:

“The example here exhibited is decidedly Ionic, the base being the only member which can claim any affinity to the Roman practise. The different members of this composition have been carefully selected from the most approved specimens of this order, with such deviations therefrom as were supposed necessary to adapt them completely to the American practice. Nor were they hastily brought into the form which they now assume, for my practice as an architect has favored me with frequent opportunities of having this example wrought by the most skilful workmen, and of removing original defects after a diligent examination of each member separately and collectively.”

A similar composite is shown as a Corinthian model. Mr. Benjamin has some ingenious comments on the Composite order:

“It has been stated that this order is not now in public favor; nor does it appear to have been held in much estimation since the days of the Roman emperors. It nevertheless has had a place assigned to it in all, or nearly all, the practical books on architecture for the last century. This order was employed by the Romans in all their triumphal arches and in other similar structures. It was ornamented in the most profuse manner; every member, where propriety did not forbid it, being covered by the most costly and beautiful ornaments. It is, therefore, reasonable to suppose that it could not have been viewed with that impartiality with which it would have been if dressed in plain attire, in which case the eye would at a glance comprehend the whole outline of the order and immediately decide on its merits, instead of being, as it in fact was, so fascinated in viewing the great profusion of the most costly and elegant enrichments as to overlook the general outline of the composition. Believing these views to be correct, and that this order ought either to be left out or in some way to be revised and modernized, I have been induced to examine in the most critical manner all the examples in my possession, and the result has been
a determination to try my skill on its reform. How well it has succeeded it is not my part to decide. Had it been one of the established orders, I should have shrunk from the task, but as this composition is denied the name and rank of an order by many of our most eminent modern architects it is thought to be a fit subject to work upon. The shaft of the column does not require any alterations from that found in the ancient examples of this order, it being there a close imitation of the Corinthian shaft as described in the explanation of that order.

"The base of the column has been left off because it was generally the same in character and effect as that which adorned the Corinthian column. The one here substituted is in the Grecian style, inasmuch as the upper torus is fluted, in imitation of many of the best examples of Grecian bases, and the lower torus terminates, and is supposed to stand, on a step without an intervening plinth.

"The lower Corinthian part of the capital is in exact imitation of that found on the arch of Septimus Severus at Rome, but in the upper, or Ionic part, there are many deviations, such as the dropping of the echinus and bead lower down, the effect of which is to reduce the plain, naked and awkward space left between those mouldings and the termination of the long leaves and to make a union between the upper and lower parts of the capital, so as to give it the appearance of one piece of composition. Before this deviation took place there was a complete separation between the upper and lower parts of the capital.

"Again, in each face of the upper part of the capital the stiff-awkward form of the Roman Ionic capital has given place to the graceful Grecian. The latter change cannot fail to be approved by all those who are judges of this art.

"In the cornice, the modillion, which generally made one pretty large member of the bed-mould, has been left off and a dentil substituted in its place. In this procedure the cornice of the example from which the leaves of the capital were taken has been imitated, but in no other respect can I claim protection for that or any other example of that order.

"I have endeavored to give to this composition a more systematic arrangement than that which it has heretofore possessed. It has already been stated, in describing the origin of this order, that it was borrowed from the Corinthian and Ionic; that, from the upper extremity of the long leaves down to the termination of the base, it was Corinthian; that the upper part of the capital was Ionic, and the entablature a mixture of both orders.

"The only difference in expense between this composition and the Ionic is, then, that of the leaves, which form the lower part of the capital. As now modernized and reformed, it will probably in many situations be found worthy of imitation."

His own offering, an additional column, he modestly suggests as a humble substitute to meet various requirements.

"I am aware that the publication of anything in the shape of an order, unless it be really one of the Grecian or Roman orders, is, by persons well versed in architecture, thought to be little less than heresy. Although I am not much disposed to differ with them in their opinion, I have deemed it advisable in this case to depart from it. My reasons for so doing proceed from the fact that more than one-half of all the columns and entablatures erected in country situations, for either internal or external fin-

ishings, belong neither to the Grecian nor Roman system. The same fact holds true in relation to our cities and large towns. Any person who will take the trouble to compute the number of instances in which some one of the regular orders is employed in any street of our cities or villages will be convinced of the truth of this assertion. I have made the comparison in two streets, which present more buildings of the first class, in proportion to their number, than any other streets of their length in this city, and have found the regular orders employed in only thirteen places, while other columns and entablatures were substantiated in twenty-three places.

"I have often inquired the reasons of this, from very intelligent workmen, and have as often received for answer that the Tuscan order is too massive and plain, the Doric too expensive and the Ionic too rich, and that they are therefore under the necessity of composing a column and entablature which will conform to the views and purses of their employers.

"With these facts before me, no doubts rest in my mind but what it would be better to give a design here of a column and entablature constructed on scientific principles, and of a character capable of meeting the views and practice above mentioned, than to leave it to be composed by unskilful hands.

"In the composition here exhibited the shaft of the column, together with its flutes and fillets, are in imitation of that found in the interior of the Temple of Apollo at Bassae. This column was crowned with a very singular Ionic capital, of an angular form. Its base was also singular in its composition. Neither of them, however, were deficient in beauty. The shaft has here been adopted on account of its novel, graceful and simple aspect. The
flutes in their section are in exact imitation of the best
Grecian Doric flutes, but differ from any of the Doric
examples by being separated by very small fillets, which are
in breadth equal to one-fifth or sixth of the breadth of
the flute. The flutes are twenty in number and descend
and terminate on the splay of the column in an elliptical
form, like their section. They also terminate at their
upper extremity on the splay in the same manner. All
the details of the flutes and fillets, and also those of the
whole composition, are very accurately drawn on a large
scale and figured in minutes. Great care has been taken
to give to the outline of all the mouldings the true Grecian
character.

"The base is in its general form somewhat like that given
by Vitruvius in his Tuscan order, but the torus is elliptical
and fluted, in imitation of some of the best Grecian
examples of the Ionic base. The base is not, therefore,
either Tuscan or Ionic, but it stands in equipoise between
the two.

"The capital is imitated from that found on the newly
discovered temple at Caduchio, in the island of Corfu. In
its annulets it partakes of both the Grecian and Roman
schools, but in the remaining details it is purely Grecian,
and a beautiful specimen of their system.

"The entablature is two diameters in height and is di-
vided into three parts—the architrave, the frieze, and the
cornice—the details of which have been selected with a
view to economy and an adaptation to the column and to
modern practice. In the cornice the corona has a great
projection and height: the crown moulding has also a
great height but a small projection. The bed-mould is
somewhat singular in its form, and about one-half its alti-
tude is recessed up into the plancer of the corona, which
allows the members of the cornice to be somewhat en-
larged. With one single exception, each moulding of this
composition is indebted to some one of the conic sections
for its beautiful variety of outline. As the selection and
arrangement of the elements which compose this column
and entablature have been the cause of much research
and great solicitude, I hope that when it shall be decided not
to employ either of the regular orders this composition
may be found worthy of being made a substitute."

What he terms "Frontispieces" deserve mention, not
so much for their own merit as for his general remarks:

"In some specimens of this important portion of archi-
tecture one frequently discovers a strange fancy exhibited
in the unmeaning cuttings, carvings and twistings of the
detrails and their frequent breaks over columns, pilasters,
tables, etc., which renders their appearance quite ridicu-
losous to a well-tutored eye. We frequently see a failure,
likewise, in the general proportion of their outlines, such
as a disproportionate quantity of glass over and at the
sides of the door. It should be remembered that the door
is the principal and the windows are subordinate. The
side and fan lights should not, therefore, occupy a larger
space than is necessary to admit a sufficient quantity of
light into the entry, and where a door is accompanied by
side lights, and a fan light extending over both door and
side lights, the outline of its upper extremity should be
a segment of a circle and not a straight line. In the lat-
ter case the distance from the upper extremity of the di-
vision which separates the door from the fan lights to its
top edge will be so great as to produce the appearance of
instability, which appearance, by the use of a curved line
bounded by an arch, is wholly avoided. But where the fan
light extends over the door only, a straight line, for its
upper extremity, is preferable to any other.

"In adjusting columns, pilasters, architraves, etc., to this
species of architecture, nothing will direct the judgment
of the student so unerringly as the often-repeated maxim
of proportioning the means to the end. Let him, there-
fore, bear in mind the extent, situation and character of
the building of which his frontispiece or portico is to make
a part, together with the size and decorations of all their
elements, as well as the burden which the columns or pil-
asters to be employed have really or apparently to sus-
tain, and, if he possesses a good knowledge of the art, the
result of his labors will probably be successful. * * *

"The example of a frontispiece exhibited here is suitably
constructed for the front of a house of pretty large dimen-
sions. The door is divided in the center by a vertical line,
one-half of which will be sufficiently large for the ingress
and egress of one person. The advantage gained by this
practice is very important in boisterous situations, as it
will admit but one-half as much cold air when opened as
it would were the whole door opened at once. * * *

"The example of an Ionic portico exhibited on this plate
is in its general proportions, and the outline of its details,
in imitation of the example of that order as represented
on Plate XIV.

A similarity may be remarked in the size and construc-
tion of the doors and side lights of this and of all the pro-
ceding examples. This sameness I do not strive to avoid,
from the belief that a great variety in the size and con-
struction of these essential but subordinate portions of
architecture is not required by a correct taste nor adapted
to the place they occupy.

"If decorations are desired on these windows, let them
be made with a sparing hand, on stained glass, and of a proper size and figure, for the student must remember that it is a maxim in architecture that the ornament must be made for the place and not the place for the ornament. A practice has heretofore prevailed among designers and makers of side and fan lights, and is not yet quite extinct, of exerting their ingenuity in the contrivance of a great variety of crooked, winding outlines, which they applied to the formation of the internal divisions of these sashes, and their imagination was again taxed in contriving a great profusion of rosettes, stars, beads, etc. After the elements had thus been adjusted upon the sash bars, their surface was often adorned with gold leaf. These gorgeous windows are often seen in dwelling-houses of exceedingly plain exterior and present a contrast quite ridiculous to a well-tutored eye.”

Hear what he has to say about ornament: “Ornaments are more or less valuable as they harmonize with surrounding objects. It is wise and prudent to use them with a sparing hand, for their absence from the composition does not necessarily imply defect, though it might imply an appearance too plain and naked to a good judge. But a work unnecessarily loaded with ornaments will be disfigured, not embellished, by them. In the execution of ornaments the subject intended to be imitated, whether it be the chestnut, the egg or the acorn, they being the usual enrichments of the ovolo, should be so deeply cut into the moulding as to produce the appearance of their being almost detached from it. The same observations will equally apply to the berries or beads, which are the standing ornament of the astragal.

“When ornaments are liable to close inspection, every part should be well expressed and neatly finished; but when their situation is such that they can be seen only at a distance, the nice finish may be omitted, but their details must be strongly expressed. In sculpture a few round strokes from a skillful hand express the subject intended for imitation more effectually than the most elaborate skillful efforts would be able to do.”

His remarks about stairs are especially interesting from a historical standpoint: “Every building consisting of more than one story is indebted to this portion of architecture for ornaments as well as utility. The height, breadth and length of the steps should be proportioned to the situation and use for which they are constructed. This remark, however, is subject to this qualification—that the height should never exceed eight inches nor the breadth twelve. Every workman is supposed to have a sufficient knowledge of all kinds of stairs, except those on a circular plan. The method most practised, of forming the circular part of the rail without a cylinder, is comparatively of recent date. To the ingenious Peter Nicholson of London we are all indebted for this method. It was invented by him and published in the year 1792, and since that time it has wonderfully extended itself into practise. In the year 1795 I made the drawings and superintended the erection of a circular stair-case in the State House at Hartford, Connecticut, which, I believe, was the first circular rail that was ever made in New England. This rail was glued up around a cylinder in pieces of about one-eighth of an inch thick. Since the first discovery of the true principles of hand-railing, Mr. Nicholson has made several important improvements, for one of which, about twelve or thirteen years since, the Society of Arts in London awarded him a gold medal. This improvement renders the subject of the most simple and direct of any of his methods. I have, therefore, adopted it as my model here, with some trifling deviations.”

He refers feelingly to some difficulties which are still encountered in building churches: “The liberality displayed by the members of this community, in the ample appropriations which they so frequently make for erecting houses of public worship, is highly creditable to them.

“The magnitude and beauty of many of these buildings render them honorable monuments of public munificence, and if many of them likewise exhibit a barrenness of invention and ignorance of architecture, this defect is to be ascribed, not to any fault on the part of those who provide the funds, so much as to the disadvantages under which those labor who are selected to construct the building. We cannot expect a carpenter to shape an edifice in so classic and correct a style as one who confines his labors to the study of architecture. Let an architect of competent skill be employed to prepare the draught of the building, together with the working drawings for the workmen; and especially, when a plan has once been determined and begun upon, let it not be in any important respects departed from, and buildings of the latter class will soon disappear. Alterations are generally expensive and are apt to destroy the symmetry of the building.

“A house erected for the worship of the Supreme Being should correspond in character with the reverential feelings of those who assemble within it. While, therefore, we aim at elegance in the form of the columns, pilasters, entablatures, ceilings, windows, and doors, let it be a grave and simple elegance and not of the gaudy kind. The details should be free from any unmeaning cuttings or twistings. Light, gay colors and all symbols of heathen worship should be avoided.

“The interior of a church would have a more chaste and (Continued on page 80)
IN this country it is probable that herbaceous plants have not yet attained the same degree of popularity as in Europe, where they rank high in public favor among all the cultivated plants for ornamental purposes. Their popularity is not surprising when one considers the many and varied changes which take place during the growing seasons, and the wonderful improvement which has been made in varieties.

With such a wide range of climatic and soil conditions here in California and an ever increasing demand for more flowers in our gardens, it is surprising indeed to note the general neglect of this most valuable and decorative class of plants, commonly referred to when spoken of at all as "herbaceous perennials." A well-planned and well-planted garden or border of perennials begins the season in earliest spring and does not complete its cycle of bloom until that same season returns again. Almost every day throughout this long period of bloom the perennial border or flower garden is changing with the seasons, something new coming into bloom continually, so that one effect is soon replaced by another before it has time to become monotonous. Such a garden is never tiresome; it's past is a pleasant memory, it's future a delightful anticipation.

Perennials usually produce the best effect when arranged as a "border planting" in front of a good background of shrubs or a hedge. A wall or fence over which suitable vines can be grown may also furnish attractive backgrounds for the wealth of bloom and foliage produced by the herbaceous material. Such a "border" can be as long as taste and room in the garden will permit, and can range in width from five to nine and even twelve feet, according to the length and general design of the garden as a whole. The "border" may face a gravel walk, or a lawn may define its outer edge either in the form of a straight line or in gentle flowing curves. A most charming vista is often produced when a straight grass or gravel walk is bordered on both sides with broad plantings of perennials and biennials, all terminating in some garden feature such as a summer house, sun dial or garden seat.

In growing hardy flowering plants we should not forget the ways of nature, choosing such varieties as are most suitable for the soil and position at hand. As a rule, how-
ever, most of them do well in any good, well-drained garden loam which has been deeply worked and enriched with a liberal application of stable manure. Some plants, like “peonies,” demand deeply worked trenches before they will produce their best growth, while all plants of this class demand good drainage, semi-aquatics being the only exception.

If one would produce the very best results with herbaceous perennials, it is absolutely necessary to prepare a planting plan of the border beforehand, showing just where each variety is to be planted. Harmony of color is of utmost importance, while a succession of bloom is necessary if the “life” of the border is to be continuous. These two important factors must be studied carefully and plans definitely prepared before planting begins. Tall growing varieties should be arranged at the back of the border, but the mistake is not infrequently made of carefully graduating the heights so that the tallest are always at the back and the lowest at the front, just as one would arrange potted plants on a greenhouse bench. In this way plants often lose a certain amount of individuality which it is necessary to maintain if the charm of the border is to be realized. A most effective arrangement is obtained by allowing some tall or medium growing varieties to come clear down to the front border, thereby producing a greater apparent depth. Such an arrangement should not be too frequent, however, because the length of the border would apparently be shortened, and the value of the long vista destroyed. Early flowering varieties should not be too near the edge of the border unless they retain good foliage until late in the fall, and others should be in front of them so that no bare places are ever apparent. Plants should be arranged in clumps or groupings in large or small numbers, according to the prevailing color note wanted at any one season.

The principal problem to solve in grouping is the arrangement of colors and one must have a good knowledge of the plants used in order to produce the best effects. Of course certain fundamental rules of color harmony must be observed and yet one’s personal taste may play a very important part in arranging color combinations. One of the hardest colors to handle is violet and it must, with some others, be placed by itself and never put near red or pink. By means of white and pale yellow one can change from blue to other colors until clear pink, dark red and deep yellow are obtained in their proper place in the border.

The maintenance of a hardy border is finally the determining factor if the very best continuous effect is to be produced. Careful watering, thorough and frequent cultivation and annual mulching with good manure are all essential operations, while the picking of seed pods and cutting of old flowering stocks help materially in maintaining a good appearance after plants are through flowering. Many varieties have a tendency to spread rapidly and they must not be allowed to crowd out other desirable plants to the detriment of the whole border.

The plants listed below are not the only ones of this class that are beautiful or desirable. There are many more, but those here listed will always prove satisfactory:

Alumroot—Heuchera
Astilbe
Baby’s Breath—Gypsophylla
Bellflowers—Campanula
Blazing Star—Liatris
Bleeding Heart—Dicentra
Candy Tuft—Iberis
Campion—Lychnis
Christmas Rose—Helleborus
Niger
Chrysanthemum, in variety
Columbine—Aquilegia
Coneflower—Rudbeckia
Coreopsis
Cornflower Aster—Stokesia
Daisy—Bellis
Foxglove—Digitalis
Fuschia
Gaillardia
Hardy Pink—Dianthus
Hollyhock—Althea
Iceland Poppy—Papaver Iris

The Plants Banking Ivy and Rose-Covered Wall

HARDY BORDER OF THE EARLY SPRING
correct appearance, if without galleries. But to the omission of galleries there are objections. Where the society is large they cannot all be seated upon the floor of the building near enough to the speaker to hear his voice distinctly; and the increased expense of erecting a building of sufficient size without galleries is considerable. It is but seldom, therefore, that we see a church of any magnitude free from this encumbrance. It is a practise with some to make only one tier of windows. This is a very becoming practise so far as the exterior of the building is concerned, but in the interior, where these windows cross the galleries, they present a very awkward appearance.

"The plans, elevations and other drawings which I have given in this example of a church have been made more for the purpose of conveying a clear and distinct view of the relation which the several parts should bear to each other and to the whole than with an expectation that they will often be executed in this manner."

And finally he gives some very sensible advice to carpenters, which is as valuable now as it was one hundred years ago:

"The principles of this science should be familiar to every practi-carpenter. Carpenters who do not possess a thorough theoretical knowledge of their art are apt either to load their work with timbers unnecessarily large and expensive or on the other hand to provide timbers too small and weak to resist, for a sufficient length of time, the strain imposed upon them. A knowledge of the stiffness of timber and other materials employed in carpentry, theoretically as well as practically, will be of the highest utility. This information is furnished by the result of various experiments, made for the purpose of ascertaining the different strains which different sizes of those materials can bear, by several scientific gentlemen of Europe. Of course these experiments were made on European timber. We, therefore, must make proper allowances for the difference of timber. Different individuals have arrived at different results in their experiments. We cannot, therefore, put implicit confidence in any of them; but, taking them collectively, and making proper allowances for difference in timber, we may assist our judgment and obtain correct views on the subject."

THE HIGHLAND HOSPITAL OF ALAMEDA COUNTY, CALIFORNIA

THE Board of Supervisors of Alameda County at a recent meeting authorized the initial contract for building construction on the Highland Hospital of Alameda County, the first unit of which will require an ultimate expenditure of one million dollars to complete, while remaining units to complete the entire group of buildings will entail a total cost of about two and one-half million dollars.

The site selected for the new hospital was purchased about two years ago and is located in East Oakland at Fourteenth and Vallecito Place. These two streets intersect at an acute angle resulting in a triangular piece of land containing about ten acres, to which the hospital plan will fit.

The lot has been graded to provide sites for the buildings and is arranged on two levels varying about fifteen feet, and the buildings designed to fit to these varying levels. The entire site is elevated above the streets and will be terraced from retaining walls and with roadways and approaches of easy grades.

The ultimate capacity of the hospital will be about four hundred beds, but the first unit will be limited to one hundred and fifty beds.

The shape of the property has permitted a plan that lends itself to economical and convenient operation on the axis line of the group, bisecting the angle of the two street fronts, and balanced symmetrically thereon will be located the Administration unit, the Surgical unit and the Service Building, while connecting corridors will travel therefrom and be extended parallel to the two streets. The Ward Buildings will radiate from these corridors, four on the Fourteenth Avenue side and three on the Vallecito Place side.

The Service Building will lie directly between the ward groupings and behind the Administration and Surgical units. It can here be seen that the groups of ward buildings are drawn in toward the Service Building, concentrating and economizing the service.

It will likewise be seen that there are no cross currents of communication as between the Service from the Administration and Surgical units and that from the Service Building.

The Service Building will have the receiving department for food-stuffs and supplies on the second floor, reached directly from a receiving platform facing the rear service yard. The main kitchen and serving room will be placed on the third floor, while the first floor of this building will be devoted to the storage of supplies, etc.

Two freight elevators will be provided for the rapid handling of materials in this department, one of which will be for the exclusive use of the kitchen, while the other will be used by the storekeeper.

In addition to the main kitchen, the third floor will contain three cafeteria dining rooms for nurses, staff and male and female employees, also a bakery, main diet kitchen, dietician's office and school, etc.
PRINCIPAL'S OFFICE

MODEL DINING ROOM
MONROE SCHOOL, SAN FRANCISCO, CALIFORNIA
JOHN REID, Jr., Architect
MAIN CORRIDOR

TYPICAL CLASS ROOM
MONROE SCHOOL, SAN FRANCISCO, CALIFORNIA
JOHN REID, Jr., Architect
MONROE SCHOOL, SAN FRANCISCO, CALIFORNIA

JOHN REID, Jr., Architect

MANUAL TRAINING ROOM

COOKING LABORATORY
FIRST FLOOR PLAN
MONROE SCHOOL, SAN FRANCISCO, CALIFORNIA
JOHN REID, Jr., Architect
DETAILS ON WARD BUILDINGS—UPPER STORIES
HIGHLAND HOSPITAL OF ALAMEDA COUNTY
HENRY H. MEYERS, Architect
DETAILS ON WARD BUILDINGS—LOWER STORIES
HIGHLAND HOSPITAL OF ALAMEDA COUNTY
HENRY H. MEYERS, Architect
WEST ELEVATION
CORRIDOR BETW. WARD NO. 1 AND FUTURE WARD NO. 3

TYPICAL ELEVATION OF CONNECTING CORRIDORS
HIGHLAND HOSPITAL OF ALAMEDA COUNTY
HENRY H. MEYERS, Architect

WEST ELEVATION
WARD BUILDING NO. 1

FRONT ELEVATION OF WARD BUILDING, SHOWING SOLARIUM

NO. 1:AL.
THE BUILDING REVIEW
DETAILED ON WARD BUILDINGS END PAVILION
HIGHLAND HOSPITAL OF ALAMEDA COUNTY
HENRY H. MEYERS, Architect
The HOME BUILDER
WESTERN EXAMPLES OF THE LARGE BRICK HOUSE

RESIDENCE OF CHESTER THORNE, TACOMA, WASHINGTON
CUTTER & MALMGREN, Architects

RESIDENCE IN SOUTHERN CALIFORNIA
R. D. FARQUHAR, Architect
INTERIOR DECORATION

THE PANELED WALL

INGLENOOK RECESSSED BELOW BALCONY

DINING ROOM, RESIDENCE OF FRANK EMERY, PASADENA, CALIFORNIA
ELMER GREY, Architect
HALL, RESIDENCE OF P. T. MORGAN. LOS ALTOS, CALIFORNIA

J. H. POWERS, Architect

HALL, RESIDENCE OF S. S. HINDS. PASADENA, CALIFORNIA

MARSTON & VAN PELT, Architects
OFFICIAL NEWS OF PACIFIC COAST CHAPTER, A. I. A.

SAN FRANCISCO CHAPTER, A. I. A.

The regular monthly meeting of the San Francisco Chapter of the American Institute of Architects was held on Thursday evening, December 18, 1919, at the Architectural Club Rooms, 77 O'Farrell Street, at 7:30 p.m. The meeting was called to order at 7:45 by Mr. Sylvain Schnaittacher, the president.

MINUTES

The minutes of the meeting held on November 20, 1919, were read and approved.

STANDING COMMITTEES

There were no reports from the Standing Committees.

SPECIAL COMMITTEES

Relations to Building Contractors: The Chair instructed Mr. Lillian Mosser, chairman of this Committee on Relations with Contractors, to make a report within two weeks, when a special meeting of the Chapter will be called to consider the same and to action on the method of taking bids and such other matters are included in the report.

GENERAL BUSINESS

Communications: From Mr. Burton E. Morse, chairman of the State Post-War Committee on Architectural Practice; from J. F. E. Davidson, chairman of the Committee on State Societies, the planning of putting a state society in operation; from Mr. H. E. Holsen, secretary of the Post-War Committee on Architectural Practice, on the work of the Executive Council; from National Federation of Construction Industries regarding the standardization and practice of constructive work which this Chapter is attempting to undertake; and from Mr. E. C. Kemper, Executive Secretary of the A. I. A., relative to the "Statement of Progress of the Post-War Committee"; and also in re Mr. Edgar A. Mathews' resignation.

Membership: On December 12, 1919, the Chapter lost one of its members through death—Mr. Harry L. Cunningham. The following resolution was offered, seconded and carried:

That the Chapter send its condolences to the widow of Mr. Cunningham; also to his partner, Mr. M. V. Polito, and that a copy of same be spread on the minutes.

NEW BUSINESS

After discussion of the letter from Mr. F. E. Davidson in re State Architectural Society, it was moved and duly seconded that it was a sense of the meeting that this Chapter does not approve the erection of a State Society in California; but, as being a better form of machinery, does endorse the proposed system of regional presentation on the Board of Directors of the Institute, and believes that it will have all the good effects of a State society without the disadvantages.

A report by Mr. Smith O'Brien on advertising was read by the airman, but on account of the absence of Mr. O'Brien no action is taken.

The report of the committee to audit the books of the secretary-treasurer, finding the accounts in order, was received and ordered adopted.

There was a general discussion of the "Statement of Progress of the Post-War Committee," but no action was taken.

A resolution was offered by Mr. Mosser and seconded, that a communication be sent to all the Chapter members quoting the provision of the Code of Ethics and Principles of Practice as published by the Institute, in the matter of architects attempting to tain work on the basis of competition in professional charges.

ADJOURNMENT

There being no further business before the Chapter, the meeting adjourned at 10 p.m.

Subject to approval .................................. 1920.

MORRIS M. BRUCE, Secretary.

NOTES OF THE ONE HUNDRED AND THIRTY-FIRST MEETING OF SOUTHERN CALIFORNIA CHAPTER, A. I. A.

The one hundred and thirty-first regular meeting of the Southern California Chapter, A. I. A., was held at the City Club, Eighth and Broadway, Tuesday evening, December 11. The meeting was called to order at 7 p.m. by the president, Mr. Patterson, the following members being present: J. E. Allison, J. J. Backus, A. B. Benton, G. E. Bergstrom, F. P. Davis, Theodore Eisen, A. M. Edelman, R. G. Hubby, J. F. Kromp, A. C. Martin, S. B. Marston, Octavius Morgan, Robert H. Orr, H. M. Patterson, A. W. Rea, A. F. Rosenheim, G. B. Van Fleet, Jr., A. Wackerbarth, H. F. Withey. As guests were present Mr. Mickeljohn, J. C. Hillman, Walter S. Davis and John Bowler.

Upon the suggestion of Mr. Rosenheim, the business of the evening was postponed in honor of the guests, and the president introduced Mr. Mickeljohn, who spoke very interestingly and at length upon the life and political conditions in Mexico, as has existed in the past five years. Following which the minutes of the 130th meeting were read and approved.

Under "Committee Reports," Mr. Withey of the City Planning Committee stated that there had been held two conferences of the City Planning Committees of the Chamber of Commerce, Municipal League, City Club, City Planning Association, Southern California Chapter and other societies, together with the members of the City Council, and as a result resolutions had been sent and requests made upon the Council to appoint a commission of fifty to take up city planning. Mr. Withey stated further that at the present time the City Attorney has an ordinance practically drafted; that all members of the Council are in favor of the commission, and very probably a city planning ordinance will be adopted and the commission appointed at an early date.

Mr. Rosenheim of the special committee appointed at the October meeting rendered a report on the work performed in the last month relative to the program for selecting meritorious architectural work in the city. After a general discussion it was moved by Mr. Morgan, seconded and passed, that the Chapter endorse the program and that the committee proceed with its plan as called for by the program, reporting at the next meeting the amounts of such funds as will be necessary for the undertaking.

Upon the secretaries calling attention of the members that at this time delegates should be chosen for the next Institute Convention, it was moved by Mr. Edelman, duly seconded and carried, that the selection of delegates be postponed until it has been learned definitely when and where the convention for 1920 will be held.

Under "Communications" the following were read:

From John S. McCray, accepting an invitation to be present as a guest of the Chapter some time after February.

From Mr. Silas Evans, president of Occidental College, tentatively accepting an invitation to be the Chapter's guest some time after the first of the year.

From E. C. Kemper, executive secretary of the Institute, relative to the Institute desiring to foster public sentiment in favor of the creation of a department of public works. Said letter was accompanied by a circular giving details of this plan. Letter was ordered filed.

From E. C. Kemper as to the progress of the Post-War Committee, enclosing report, etc. Same was ordered filed.

From Charles Whitaker, editor of the Journal, stating that he would be visiting Los Angeles on or near the 21st of January and desired a meeting of the Chapter at that time. It was moved and duly voted that the president and secretary make arrangements for this meeting.

Annual election of officers being the next item on the program, the secretary read the report of the nominating committee made at the last meeting. There being no other nominations made, it was moved by Mr. Edelman, seconded by Mr. Kemper and duly passed, that the secretary cast the ballot. Whereupon the president declared the following officers elected to office: C. E. Bergstrom, President; H. F. Withey, Vice-President; R. G. Hubby, Secretary-Treasurer; August Wackerbarth, Treasurer; A. M. Edelman, member of the Executive Committee.

The secretary reported an invitation given by the Washington Iron Works to the Chapter to visit its manufacturing plant, and it was voted that the next regular meeting be held there.

The meeting adjourned at 19:30.

H. F. WITHEY, Secretary.
The birth of the power elevator for freight and passenger service took place about the middle of the nineteenth century. Elisha Graves Otis, one of the earliest elevator inventors, and the founder of the Otis elevator industry, began his investigations in 1854. Since that time the history of the elevator business has paralleled that of the Otis Elevator Company.

Mr. Otis was born August 3, 1811, in the village of Halifax, Vermont. When he reached the age of nineteen, he left his father's farm and turned his attention to mechanical pursuits. For a time he pursued the trade of blacksmith and later engaged in the manufacture of wagons and carriages. In 1849 he became superintendent for the "Bedstead Factory" at Hudson City, N. J.

It is interesting to note that Mr. Otis' entry into the elevator business was, in a sense, accidental. While erecting some new buildings for the "Bedstead Factory," which had removed to Yonkers, N. Y., in 1852, he found it necessary to construct an elevator in one of the buildings. In designing this elevator he began work on some original devices, particularly a ratchet safety. The elevator attracted the attention of some New York manufacturers and Mr. Otis received contracts for building two others. He continued building elevators of this type for a year and then started a manufacturing business of his own in a little shop at Yonkers on the banks of the Hudson, near the present plant of the Otis Elevator Company. Figure 1 shows a picture of this plant, and the contrast between this and the present main factory should be noted.

With Mr. Otis, safety was a matter of devotion. He realized that the whole question of the elevator's existence and progress rested on the extent to which elevators were made safe, and even when not demanded by the purchaser, his elevators were invariably equipped with safety devices. At the opening of the International Industrial Exhibition in the Crystal Palace, New York, in 1853, Mr. Otis placed a small elevator on exhibition, which embodied the improvements he had made up to that time. By way of showing his absolute confidence in his safety device, he stood upon the platform, which had been raised to a considerable height, and cut the ropes. The safety device arrested the fall of the platform with injury to him and thus demonstrated the reliability of the elevator safety device.

In 1861 the management of the business was assumed by M. Otis' two sons, Norton F. and Charles E., under the name of N. Otis & Brother, which name was later changed to Otis Brothers Company. During the Civil War their business was seriously retarded, but the Otis brothers persevered and soon won their up fight, increasing their business to such an extent that in 1868 extensive enlargements in the Yonkers plant became necessary.

An interesting side light on the history of the elevator industry is the invention, in 1859, by Otis Tufts, a Boston engineer, of elevator which he called a Vertical Steel Screw Railway. One of these was installed in the Fifth Avenue Hotel and attracted great deal of attention. This type of elevator, however, proved to be so expensive as to be almost prohibitive, the cost of this installation being about $40,000.

The history of the elevator industry may be divided, according to the power used to drive the elevators, into four periods, name belt, steam, hydraulic and electric.

The earliest machines were of the belt-driven type and until 1867 these were used for all ordinary factory service and steam-driven machines were employed for heavy freight and passenger service.

In 1877, however, Otis Brothers & Company made a radical departure in the elevator industry by the introduction of the hydraulic elevator. This machine possessed many advantages over the steam type, the principal advantage being that of greater speed.

In its first simple form, the hydraulic elevator consisted of a ram supporting the carrying platform. The ram was worked up and down by water being forced into or ejected from a closed cylinder surrounding the ram. Following this type came the geared hydraulic machine. In this type the cylinder was retained but the ram was discarded in favor of a piston which traveled but a portion
Lisha Graves Otis, Founder of the Otis Elevator Industry

L. C. Smith Building, Seattle, Equipped with Eight Otis Gearless Traction Elevators

The First Otis Factory, Started in 1853 at Yonkers, New York
the distance traveled by the car. Cables were passed around multi-
plying sheaves and connected to piston and car to give the nec-
essary car travel.

The next development in the elevator came with the invention of the
vertical hydraulic machine, and for many years this type was the
standard for passenger service. The vertical hydraulic elevator was
invented by Mr. Cyrus W. Baldwin, who joined with Otis Brothers &
Company in 1875, and whose patents were acquired by them at
this time. The first vertical hydraulic machine was installed by
Otis Brothers & Company in the St. Stevens Hotel, Eleventh Street,
New York. This elevator is still in use.

During the decade from 1890 to 1900 the Otis High-Pressure
Geared Inverted Plunger Hydraulic Elevator was developed and in-
stalled in many important buildings, and during the later years of
this period the plunger elevator was developed and quite extensively
used.

But even as the hydraulic elevator progressed in speed and gen-
eral efficiency, electricity began to be widely used for lighting and
power purposes. Otis Brothers & Company, anticipating the use
of electricity as a driving power for elevators, directed their efforts
towards the development and production of an efficient electric
elevator machine, together with the solution of the complicated
features of safety and accurate control.

About this time there were many other concerns experimenting
on electric machines and controlling devices, but it was not until
1889 that the first successful electric elevator was completed and
installed by Otis Brothers & Company in the A. T. Demarest Build-
ing, 335 Fifth Avenue, New York City. This elevator is still in
operation.

The development of the electric elevator and its tremendous in-
fluence on the increasing height of buildings forms an interesting
chapter in the history of the elevator industry.

The first electric machines were confined entirely to the drum
type; that is, a machine with a grooved drum about which the
hoisting cables of the car are wound, the drum being driven
through a worm and gear by an electric motor. In its perfected
and refined design this type of elevator is widely used today in a
great many buildings of moderate height.

An interesting development of this type of machine, and one
which has been lately extended to the traction elevator as well, is
the automatic push button elevator, which is particularly adapted
to use in residences, private institutions, apartment houses and
other places where intermittent service prevails and where an op-
erator is not desired. This type of elevator is operated by means
of a series of push buttons, which enables the passenger to call
the car from another floor and, after entering, travel to any floor
desired by the momentary pressure of the proper button.

The modern skyscraper, rising to many stories, made the drum type machine impractical because of the tremendous
length of the winding drum required for the winding up of the hoisting cables. The necessity of an electric type of elevator to meet the increasing
heights of buildings brought about the development of the gear
traction elevator, and out of this was evolved the gearless traction
elevator, which represents the latest and most efficient elevator in
use today. This type of machine is noted for its simple, compact
design and its starting, stopping, and control features. Those on
many other advantages, including speeds up to 700 feet per min-
ute, have given this elevator precedence over all others for sky-
scraper service.

Some of the most notable buildings equipped with Otis gearless
traction elevators are the Woolworth, Equitable, Bankers Trust
and Singer, and Metropolitan buildings of New York. On the Pacific
Coast the tallest skyscraper is the L. C. Smith Building in Seattle.
This building is equipped with eight Otis gearless traction eleva-
tors, one of which travels to the thirty-third floor, a distance of 37
feet, and another of which travels to the thirty-fifth floor, a dis-
tance of 380 feet.

Another interesting type of electric elevator, and one which con-
stitutes the most radical development in elevator design in recent
years, is what is known as the Otis Micro Drive Push Button Con-
trol Elevator. The principal feature of this elevator is the micro
leveling device, which automatically holds the elevator platform
level with the landing floor, irrespective of load conditions. The
elevator has been used principally for freight service, but is com-
ing to be applied to all types of elevators for both passenger and
freight service. Every operation of the elevator is entirely auto-
nomous. It is not too much to say that in the near future we may
be spared the injunction, “Watch your step,” which we so often
hear now when leaving or entering an elevator, for with the micro
leveling device the elevator will automatically make an exact land-
ing, independently of the operator in the car.

In 1898 Otis Brothers & Company, the Crane Elevator Com-
pany and several other elevator manufacturers consolidated and formed
the present Otis Elevator Company. To facilitate the construc-
tion and maintenance of elevators in all parts of the United States,
district offices were established in various sections. Under the juris-
diction of these offices 119 branch offices have been opened, un-
it now every elevator user is within reach of some Otis service office.
The company has also extended its policy of expansion to the for-
eign field, and practically every country in the world is now served
by one or more of its eighty foreign offices.

The organization of the Pacific Zone, with headquarters at 230
Seattle, $5,235,695

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Total: $15,163,242.00

Over 10,000 elevators have been installed on the Pacific Coast, and these over 3000 are in San Francisco.

One of the prominent features of the Otis organization is its thorough inspection service. Under this service, trained elevator inspectors make thorough examinations of elevators weekly, semi-monthly, or monthly, and see that each part is properly cleaned, lubricated and adjusted. Whenever a wearing part shows deterioration, the owner is promptly advised, so that he may make provision for replacement before damage or breakage occurs. This inspection has been proven economical and efficient. Its popularity is attested to by the fact that at the present time over 2300 elevators on the Pacific Coast are under the care of Otis inspectors.

The advantages to be found in the Otis nation-wide sales and service organizations will be appreciated by every architect, builder and elevator user. Otis offices can be reached at all hours of the day and night and on Sundays and holidays, so that they offer a continuous, dependable service that embraces expert sales engineers, repairmen and inspectors. No matter where the architect may be situated, he will find an Otis office accessible.

The Otis Elevator Company invites architects to call upon it when laying out their elevator requirements and will gladly give the benefit of its experience and engineering facilities to work out plans for proper equipment and economical space arrangements.

**The CONTRACTOR**

**BUILDING STATISTICS OF SAN FRANCISCO AND OAKLAND, CALIFORNIA, FOR 1919**

COMPILED BY MUNICIPAL BUILDING DEPARTMENTS

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**COMPARATIVE STATISTICS, 1916—1919**

**SAN FRANCISCO**

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REFERENCE INDEX OF ADVERTISERS

Containing List of Manufacturers, their Representatives and Useful Literature

THE BUILDING REVIEW

ASBESTOS BUILDING LUMBER
J. A. Drummond, 245 Mission Street, San Francisco, Cal.
Illustrated and descriptive pamphlets, 7½x10½, 8 pp. Pamphlets, 4½x6½, 8 pp. Price list, 5½x8½, 14 pp. Literature of various sizes, samples, etc. "Service Sheets," working drawings, details of application, size 16½x21½.

ASBESTOS CORRUGATED SHEATING
J. A. Drummond, 245 Mission Street, San Francisco, Cal.

ASBESTOS SHINGLES
J. A. Drummond, 245 Mission Street, San Francisco, Cal.

BARS, REINFORCING
Pacific Coast Steel Co., Rialto Building, San Francisco, Cal.
Square, round and corrugated.

BRICK, FIRE AND REFRACTORIES
Gladding, McBean & Company, Crocker Bldg., San Francisco, Cal.
Simon Brick Company, 125 West Third Street, Los Angeles, Cal.

BRICK, PRESSED
Gladding, McBean & Company, Crocker Bldg., San Francisco, Cal.
Simon Brick Company, 125 West Third Street, Los Angeles, Cal.

CEMENT, PORTLAND
Santa Cruz Portland Cement Co., Crocker Bldg., San Francisco, Cal.
Bulletin, 12 pp. Size 6x9; also furnish bulletins and specifications for various classes of work requiring Portland Cement.

Henry Cowell Lime and Cement Co., 2 Market St., San Francisco, Cal.
Cowell Portland Cement Co., Cowell, Cal.
Mt. Diablo Brand especially adapted for cementing all walls. Literature and pamphlet supplies on request as furnished by the Portland Cement Association.

CONTRACTORS' ASSOCIATIONS
Building Industries Association, 110 Jessie St., San Francisco, Cal.
General Contractors Association, Sharon Building, San Francisco, Cal.

DAMPERS
Peerless Manufacturing Co., Louisville, Ky.
Peerless Dome Dampers, Peerless Ash Traps and Peerless Ash Doors.

ELECTRICAL EQUIPMENT
J. A. Drummond, 245 Mission Street, San Francisco, Cal.
Descriptive Pamphlet, 3½x6, 12 pp. Descriptive. 4½x6 8 pp. "Service Sheets," working drawings. Detail of application, 16½x21½.

ELEVATORS
Otis Elevator Co., Eleventh Avenue and 26th Street, New York, N. Y.
Otis Elevator Co., 2300 Stockton Street, San Francisco, Cal.

ESCALATORS
Otis Elevator Co., Eleventh Avenue and 26th Street, New York, N. Y.
Otis Elevator Co., 2300 Stockton Street, San Francisco, Cal.

GLASS
San Francisco Office, L. H. BUTCHER CO., 241 Montgomery Street, Pamphlets and illustrated literature.

W. P. Fuller & Co., Principal Coast cities.
Plate, Sheet and Mirror Lists. Glass Samples.


IRONING BOARDS
Pamphlet, 3½x6½, 4 pp.

LANDSCAPE ENGINEERS
Macleod-McLaren Co., 141 Powell Street, San Francisco, Cal.
Descriptive catalogue, 5x8½, 52 pp.

LIME
Henry Cowell Lime and Cement Co., 2 Market Street, San Francisco, Cal.

MILL WORK

PAINTS, ENAMELS AND WOOD FINISHES
Berry Bros., Wight and Leipe Streets, Detroit, Mich.

Berry Bros., 250 First Street, San Francisco, Cal.
Luxberry Cement Coating Color card, 3½x8½, 3 pp. Architectural Finishes. Illustrated.

Boston Varnish Co., Everett Station, Boston.

San Francisco Office, A. L. Greene, Mgr., 269 Eighth Street.

W. P. Fuller & Co., Principal Coast cities.

H. N. Nason & Co., 151 Potrero Avenue, San Francisco, Cal.
Catalogues, literature and color cards.

Standard Varnish Works, New York and San Francisco.

Wadsworth, Howland & Co., Inc., 139 Federal Street, Boston.

San Francisco Office, James Hambly & Sons, 258 Market Street, San Francisco, Cal.

Los Angeles Office, 414-449 E. Third Street, Los Angeles, Cal.

PLUMBING EQUIPMENT

Northern Manager, H. L. Frank, 80 Front Street, Portland, Ore.

T. A. Williams, Scott Building, Salt Lake City, Utah.

PIPE, WOOD
Pacific Tank & Pipe Co., 218 Market Street, San Francisco, Cal.
Catalogue of wood pipe and tanks for all purposes. 4x9, 48 pp.

PORTABLE HOUSES

ROOFING
W. P. Fuller & Co., Principal Coast cities.
Samples and descriptive circulars.
Finished Throughout with **Kyanize**

Our new books "Recent Pacific Coast Architecture" and "The Inviting Home," containing Practical Specifications, mailed on application.

**Boston Varnish Company**

San Francisco Office and Warehouse: 269 Eighth Street

A. L. GREENE, Local Manager

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Los Angeles
SUNSET PAINT CO.

Ogden
OGDEN PAINT, OIL & GLASS CO.

El Paso
SUNSET PAINT CO.
PLATES

Rheims Cathedral
Interiors—Cambridge, and Peterborough Cathedrals
Residence of G. C. Rew
Fountain—St. France Wood
Residence of F. W. Peters
Residence on San Benito Court
Residence for Garden Homes Co.
Residence of Mr. Fritze
Residence of Mr. S. P. Leighton
Argonne School, San Francisco
Gardens

Building

Architect

Plates

Elmer Grey
Gertrude Comfort
H. H. Gutterson
H. H. Gutterson
H. H. Gutterson
H. H. Gutterson
John Reid, Jr.

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TEXT

Gothic in Relation to Architecture in America
Livable Gardens
Official News of the Pacific Coast Chapters, A. I. A.
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This Beautiful Club House
Is Finished With

FULLER'S PIONEER
SHINGLE STAINS

These stains are very attractive and
produce a soft and subdued color
effect, without hiding the grain of the
wood.
Pioneer Shingle Stains have a creosote
base, to protect and preserve shingles,
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"Fuller's Paints protect
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Bark protects the Tree"

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Paint Manufacturers
Mankind to-day enjoys the accumulated wisdom of the ages. Long lines of explorers and discoverers, thinkers and dreamers, have gone before us; they have hewn the path that civilization might move forward. Man nevertheless, has progressed slowly, laboriously with many setbacks. Many of the laws, works of art and basic principles of science and mathematics have been handed down the ages to our time. They are the heritage of the race.

Architecture, like other forms of human endeavor has evolved from one stage of development to another; sometimes undergoing extensive changes, sometimes adapting old forms, resuscitating methods that had been discarded by the preceding generation and infusing new vitality into it.

Gothic architecture is an illustration, where the builder adopted old forms of construction, and sought inspiration from a preceding period. Progressing and developing until a beautiful style resulted. The Gothic was primarily the style of the church, and when we speak of

"Gothic," there immediately springs up in our mind’s eye, some stately and wondrous cathedral. But the term is slowly assuming a different meaning, it conveys a different impression, of a structure entirely distinct from the church.

Notre Dame of Paris, St.-Remis at Reims and the Cathedral of Amiens are structures erected by the people, for worship and glorification of the Deity. The Woolworth building was erected by an individual and is a great temple of commerce. It is the salient example of Gothic art in America.

The style with its slender piers, flying buttresses, and pointed detail is the logical expression of the high slender structure, and it is the solution of the tall office building. It is man’s instinctive desire after height.

Compare the Woolworth Building, rearing itself above the surrounding city, with any of the great abbey churches or cathedrals of Europe; they too seem to soar above the house tops; there is lightness combined with strength, beauty with grace.
When art held sway in the older buildings, mechanical perfection has assumed the important place; science has taken the place of art. The stained glass windows, with their delicate tracery; the carved ornament and detail the statuary and sculpture have been replaced, and the designer now directs his efforts towards erecting a structure that will contain the best of modern accessories, for comfort, convenience and safety.

The architect of today is asked to rear a building in the shortest possible time, and the time that is spent in the erection of a building today would have been looked upon as a miracle by the builders of the middle ages; to be accomplished only with the aid of some good Genii or other supernatural agency. The designer is over-whelmed by a wealth of materials, he also has problems to contend with that the builder of the medieval times knew nothing of.

The craftsman of the middle ages would devote his time to some detail, it might be an altar, or possibly the portal would be given to his care to be designed and executed by him; he was an artist and would put the most pains-taking effort into making it a thing of beauty. Time was no object and he would linger over it, nothing was superficial, nor done in haste; each slender column and every bit of ornament received the same patient care. Those early builders leaving the impress of their genius in stone, reaching down to our own day and inspiring us to greater artistic endeavor.

Have those masterpieces of the middle ages any influence upon architecture in America? Can those edifices of the past, silent, still and eternal as the snows of the Himalayas, influence our artists, inspire them with a love of beauty, so that they too might soar above mediocrity and attain perfection? Will it be possible to create masterpieces equal to those of by-gone ages? But must we always refer back to old copies, repeat motives and use the same designs as the craftsmen of the medieval times? Can we revive old style and use it to attain higher planes of architectural perfection?

It is not enough that the workers in the arts feel the need of higher standards, for a great art is the reflection of the times and of the people; it is a growth, when we create and achieve the ideal, it will be because the people demand it, when they refuse to accept old worn-out forms, and look about them for motives expressive of their own ideas, and develop architecture that is distinctively modern.

Tradition is an important factor in our lives, we are burdened with it. It plays a part in religion, literature, science and in the arts. Possibly it is well that it should be so, for it is a restraining force, a standing influence. We reach down the galleries of time and sort and adapt that which applies to the problems of this modern area. But we must proceed, not stop. They have furnished us the suggestion and it is for us to continue and develop; evolving into other forms, branching out and giving expression to that which pertains to the present.

Those vast interiors, of the Gothic cathedrals, of the middle ages, were typical of the times in which they were built. The great height, the semi-darkness, the air of mystery and the granduer of those places of worship, filled the minds of the multitude with awe and reverence. Today the people do not accept the same legends and myths, as did their forefathers, the solitude and mysterious do not impress them. The modern edifices has assumed a different character. It is flooded with light, the sites are not always well chosen, the motives that were instrumental, in the erection of the church of the middle ages, are not the same that prompt us in our artistic endeavors.
Is the Gothic architecture the spark that will ignite the latent spirit of originality in American architecture? We cannot hope to express our own individuality as a nation, by continually adopting old styles; importing the art of foreign soils. We will have an architecture that will be a national expression of the manner in which we live and have our being; when the old will merge with the new, and when that which is local and characteristic of ourselves will predominate. It is then and only then that we may hope to attain the ideal.

THE END
YORK CATHEDRAL
YORK, ENGLAND.

CHOIR AND CHANCEL
PETERSBOROUGH CATHEDRAL
LIVABLE GARDENS

By HORACE GEORGE COTTON*

To the trained landscape architect there are as many rarities, types, styles, and mixed breeds of gardens in the world as there are styles of architecture apparent to the eye of the trained architect. Formal Gardens, Informal Gardens, French Gardens, Italian Gardens, English Gardens, Rock Gardens, Rose Gardens, Rock Gardens, every conceivable kind of a garden from a pink geranium on the windowsill of a "third floor back" to the gorgeous, spectacular exhibits in the wealthy suburban park-manors where aristocracy are wont to display their worldly goods in exhibitions of the garden's finest, all are familiar to the landscape ar-

Contrast our gardens here in America with those of Europe and we find one striking difference. Shelter, privacy, intimacy, are the first considerations of the European garden. On pleasant days callers will invariably find the hostess in some nook or hidden corner of the garden enjoying the utmost the intimate contact with nature which these less conspicuous types of gardens make possible. Should our American hostess spend the afternoon in the average American garden the whole neighborhood would know about it, and should there be a tea house or an arbor therein it is nine times out of ten located in the front or side of the house and open to public view.

I am therefor making an appeal for two things, first, to make our gardens more private and second, to place within them more accommodations for comfort and pleasure than are found in most cases. In other words to make the garden more livable.

In other sections of the country where snow and ice lay bare the shrubs and trees of their foliage and tuck in the flowers for a period of rest for five to six months each year, it is impossible to bring the garden into the daily life of the garden lover, but here in this climate, that is so much talked about, why do we not attempt to take advantage of the blessings of nature and make the most of them? And I do believe that we are learning to enjoy to a greater extent the wonderful gifts of nature and to give our gardens that intimate touch of privacy which allows us to make a greater use of them as places in which to live as well as to merely look at.

The things which go to make a garden more enjoyable, as has been said, are privacy and comfort. The front lawn and foreground leading up to the house must, of course, present an attractive appearance and set off the house to the best advantage, and because of its exposure to public view should be kept neat and presentable at all seasons, but somewhere, to one side or in the rear, there should be some spot easy of access to the house where it is possible to spend odd moments in enjoying the peace and beauty of nature in seclusion and privacy.

Cold stone walls are not necessary to divert the gaze of the passerby, nor are stiff picket fences required to keep trespassers from intruding. By the proper use of informal masses of flowering shrubs, with perhaps here and there a green hedge providing that sheltered feeling so desirable yet not laying down the boundary lines in cold hard fashion are we brought in intimate contact with nature.

In building up the home type of gardens there are a number of points it is well to keep in mind. First, these little nooks and corners desired for havens of rest or out-of-door living rooms should be conveniently located with regard to the house. If placed just off the living room or sun porch they will prove a convenient and charming location for afternoon teas, sewing, or for spending a few odd moments that may be too short to hunt a more isolated retreat.

If the garden is a large one it may be well to provide a number of comfort corners at various points throughout the garden as one can easily tire of walking when all paths converge one into the other and finally lead back to the house with no provision made for places where one can stop and enjoy the landscape.

Garden features in the form of tea houses, arbors, summer houses, pagodas, jungle huts, grottos, depending upon the type of garden plan used should, therefore, be used more frequently and gardens built up around them in such a manner as to make these features the chief center of interest.

On a large estate it may be well to provide a number of different types of garden features. Where changes of contour and masses of shrubs and trees form irregular boundaries it is possible to develop a chain or a successive combination of a number of small and interesting bits of gardening scenery, all separated from each other yet brought into a composition by informal trails and paths leading through all points of interest. Some of the better known types of these small gardens and special features may be worthy of special consideration.

Courts and Patios—In such typical California styles of architecture as the Spanish Hacienda, the Mission or the Aztec types, we find the house embracing a bit of garden within its walls in the form of a patio or court. Such a feature not only offers the gentle touch of nature within the home itself, but permits an excellent arrangement of the interior of the house.

We often find a patio or enclosed court used much as a living room and the cool green foliage with shadows beneath, with perhaps a fountain in the center and cool slabs of tile under foot this feature may easily become the most attractive portion of the home.
varieties can be grown successfully within these enclosures. If screened in color and interest can be added by the introduction of birds of rich plumage. One of the richest and at the same time handsomest patios was found by the writer in the Pan American Building at Washington, D. C., a corner of which is illustrated herein. Thus by offering beauty, fragrance, coolness and a central location this feature becomes a center in the life of any home.

AN ARBOR
When covered by mistarla or climbing roses, this feature will prove most delightful.

THE ROSE GARDEN TEA HOUSE
What more charming than this little Rose Garden Tea House and its surroundings tucked away in one of the beautiful East Bay gardens.

There is also the Rose Garden with its arbor and gorgeous display of bloom. This feature can be made a bower of enchanted loveliness for many months of the year and can form one of the chief attractions in the garden. As roses do best when given special care and cultural condi-
tions it is better that they be placed by themselves in a corner of their own where the necessary treatment can be given without disturbing or interfering with the rest of the garden.

The Old Fashioned Garden containing the old time perennials and annuals, such as the hollyhocks, mignonette, larkspur and other old favorites can be a source of inspiration for many months each season.

Cut Flower Gardens, although not so beautifully arranged are one of the important corners, as it is in these places that all cut flowers for the house can be raised and the plants can be cut as much as desired without detracting from the general appearance of the remainder of the garden.

The Japanese Garden is a feature quite distinct from anything that has ever been attempted before its introduction. Its most remarkable feature is that the appearance is always neat, clean and extremely inviting at all times of the year. It always contains a thatched tea house or pagoda, or resting place of some kind where the garden lover can rest and enjoy the outlook.

A Rock Garden is an extremely interesting and distinctive type of garden. The browns and reds and other rich tones of the rocks give a touch of warmth to the garden that is hard to duplicate. Rock loving plants with their scarlet or orange tufts of minute flowers protrude out of crevices and ferns springing out from under rock overhang, softening the rough outlines. A most charming type of garden if properly isolated and not overdone.

SIMPLE TEA HOUSE IN JAPANESE GARDEN
The Tea House is the central motive of this Japanese Garden found in Claremont. The tree passing through the floor and roof becomes a part of the structure, making this feature more rustic and more a part of the garden around it.

Water Gardens, rare in this part of the country where water is a problem, but still one of the most pleasing. Water lends a coolness and freshness to the atmosphere hard to attain in any other way and if a small waterfall or fountain can be worked into the scheme the sound as
well as the scenic effect is most restful. Water grasses and cresses help to soften the margins of the pool with hyacinths and lilies breaking the surface and thrusting their bouquets of rare and fragrant blossoms toward the heavens.

I HERB Gardens, small inconspicuous, corners that one stumbles on to as if by accident, containing the sweet pungent odorous thyme, sage, sweet lavender, lemon-scented vebenas, and other old fashioned herbs and spices adding greatly to the charm and diversity of the garden. Where there is plenty of room the Wild Garden with its rough hillside or hidden canyon sown to wildflowers and wild grasses, and sheltered by the ragged buckeye or low-spreading oak, adds that sense of bigness and loneliness which can only be felt when in touch with something entirely natural and isolated from the more civilized parts of the cultivated garden. Here a rustic stone seat with the overspreading arms of a buckeye as shelter overhead offers a place for rest and is not so artifically constructed as to give the feeling of stiffness.

The Sunken Garden is a distinctive feature in itself, the chief attraction of this type being the perspective view obtained of the whole garden. Here again the garden should be made livable by the use of an observation house comfortably supplied with garden furniture. Along the coast where rugged slopes and canyons bend steeply toward the sea and in garden spots that cling to the margins of our virgin hillside, our rough western mesas, arroyos, canyon and gorge the Terrace Garden proves a most adaptable attraction. In this rugged, semi-natural type of garden small observation houses placed at different elevations with trails winding up and down the hillside in zig-zag fashion leading thereto, and protected by our native Mesquites, Toyon, Carambula, and Ceanothus form the greatest attractions of this garden. Such artificial work as becomes necessary in adapting such a stretch of hillside to domestic purposes should be kept rustic in nature and so blended with the warm tinted rocks and ragged vegetation as to harmonize with them forming as wild and weird and natural a feeling as when these hillsides were first trodden by Indians. I cannot help but recall the wonderful terraces and seaside grottos in the gardens belonging to the Prince of Monaco at Monte Carlo. Here gardeners have spent a lifetime in terracing the cliffs and cutting grottos out of the solid rock overhanging the sea.

Graves of trees and thickets also become features of great interest if given room enough to properly develop. Hidden in these wooded spots can be placed barbeque pits, rough log picnic tables, or an earthen floored cabin. Within these hidden isles of columnar trunks one receives perhaps the greatest feeling of seclusion and sense of being alone with nature of any of the various types of gardens.

The Jungle, a feature of great interest if properly isolated from other parts of the garden, Bamboos, palms, jungle grasses, palm thatched huts, sluggish pools, trails that are so faint as to be hard to follow and which seemingly lead nowhere and start from nowhere, and which tend to lose one's sense of direction, and the whole effect leading one's thoughts and imagination thousands of miles away to the banks of the Nile or the Emperors, lifting one for a time out of the commonplace. These un-usual effects go far in adding to the interest and individuality of the garden.

Many more types of gardens are there from which to choose, but volumes would be required to adequately deal with them all and in fact, volumes have been written on single types, so that only a hurried comparison can be made in these few paragraphs. But it is here desired to call attention to the one fact that the greatest value of the garden is not the showy public exhibition but rather, the intimate contact which one finds and enjoys in the more sequestered types and in which the hidden nooks and corners offer that homey, livable feeling that invites direct association and acquaintance. Make the garden more livable.
AN FRANCISCO CHAPTER AMERICAN INSTITUTE OF ARCHITECTS.

The regular monthly meeting of the San Francisco chapter of the American Institute of Architects was held Thursday, March 18, 1920, at Tait's Cafe, 168 O'Farrell Street.

The meeting was called to order by Mr. Sylvin Schnaittacher, the President, at 12:45 P. M.

MINUTES

The minutes of the Special Meeting held on January 4th and of the regular meeting held on January 29th, 20, were read and approved. No meeting was held in January, owing to a lack of a quorum.

STANDING COMMITTEES

S. F. SUB-COMMITTEE ON COMPETITIONS: Mr. Sylvin Schnaittacher, Chairman. A meeting of the committee was held on March 5th at 4 P. M. to discuss a proposed Competition for a San Mateo County Hospital. The Committee approved the same, subject to certain suggestions which were submitted to the San Mateo County Clerk, for incorporation in the Program. Under date of March 15th a communication was received from the San Mateo County Clerk stating that the suggestions are accepted by the Board.

RELATIONS TO BUILDING CONTRACTORS: Mr. Iliam Mooser, Chairman. Mr. Mooser submitted a report as per communication received from Mr. L. R. Armin of the Electrical Contractors and Dealers Association.

GENERAL BUSINESS

COMMUNICATIONS: From Mr. Henry K. Holman, secretary of the Post-War Committee on Architectural activity in re National Committee on Education, with tentative draft of questions or program for discussion; from Indiana Limestone Quarrymen's Association in-rems and lecture to be held for this Chapter in May, 1920; on Smith O'Brien in-re-ads; from National Federation of Construction Industries relative to the first annual Meeting of the Association; from Mr. E. C. Emperor, Executive Secretary of the Institute in-re-ange in Schedule of Charges; also one in-re-letter to be submitted to Mr. D. J. Wheel, on behalf of the Institute, to the Pennsylvania Building and Loan Association requesting information on the subject of the national campaign for the promotion of the Building and Loan business.

WASHINGTON CHAPTER.


The American Institute of Architects—The Octagon, Washington, D. C., Officers for 1918: President, Thomas K. Kimball, Omaha, Neb.; First Vice-President, Charles A. Favrot, New Orleans, La.; Second Vice-President, George S. Mills, Toledo, Ohio; Secretary, William Stanley Baker, Boston, Mass.; Treasurer, D. Everett Wald, New York, N. Y.


Washington on May 5th next, asking this Chapter to participate in the exhibition; from Dr. Carol Aronovich asking that the Chapter appoint a committee to cooperate with the State Commission of Immigration and Housing Institute which is to meet in this city on April 12, 1920; from Mr. E. C. Kemper relative to maintaining the Construction Division of the War Department.

NEW BUSINESS.

In the matter of an architectural exhibition at the next Convention of the Institute, the President stated that this Chapter would be represented.

Various suggestions were made by members as to methods of educating the public and particularly committees of Boards having charge of public works, in the proper methods for employing architects. Pursuant to this discussion it was moved by Mr. Mooser and seconded, and carried that the Chair be instructed to call for a number of volunteers who would make pilgrimages to various interior cities and towns and meet with the local Chapter members and others in discussions of the methods of architectural practice.

Discussing the recommendation of the Cleveland Chapter that the Schedule of Minimum Charges, be changed, it was resolved on motion of Mr. Kelham, and duly seconded and carried, that it was the sense of the meeting that the Chapter did not approve increasing the minimum charge from six per cent to eight per cent, and further, that the Chapter agrees with the recommendation that the provision for extra compensation for engineering should be stricken from the schedule.

The method of advertising the profession in the Daily Press as reported by Mr. Smith O'Brien, was referred to the Board of Directors for their recommendation.

Mr. Mooser reported progress of the Committee on Relations with Contractors.

MEMBERSHIP.

The Chapter regrets to record that on January 24th, 1920, Mr. George H. Sanders, an Honorary member of this Chapter, passed away. The Chapter sent a copy of Resolutions to Mr. Applegarth expressing its regrets for the loss of Mr. Sanders.

ADJOURNMENT.

There being no further business before the Chapter, the meeting adjourned at 2:30 P. M.

Approved April 15, 1920.

MORRIS M. BRUCE, Secretary.

(Continued on Page 18)
EDITORIAL

THE BUILDING REVIEW has entered upon a new era, its scope will be broadened and its contents varied. It is a progressive periodical, but not revolutionary—it will be governed by standards of good taste. In the past it was issued primarily for the craftsman and professional man and was a strictly technical publication.

It will still retain its value to the architect, and will endeavor to attract the attention of all who are interested in architecture, civic improvement, and the arts and problems kindred to building industry.

The plate section will contain illustrations of current work, and the main articles will be devoted to subject pertaining to the domain of art, garden architecture, and civic improvement subjects of vital interest to every man and woman interested, and it will be part of The Review’s policy to give reading matter that will be inspiring as well as instructive to the layman and woman, and enabling them to arrive at decisions upon matters pertaining to architecture.

The majority of us are so engrossed in our own work that we have not the time nor opportunity to observe what others are doing even along lines of work kindred to our own. The Review will furnish short technical articles of interest to the building industry and along lines that will supply information to the professional man.

The crying need for dwellings is felt throughout the country. The proper housing for the multitudes that swarm into our cities has raised a vital issue and local authorities have attempted to solve the problem in various ways.

"Architecture” prints an interesting article upon "Co-operative Apartments.”

"There are thousands of families, many thousand individuals, living in makeshift apartments in every city and town in the country. They are paying exorbitant rents, getting less and less service in return for their money, and wondering when the house is going to be sold and another landlord pirate come in for his pound of flesh. There is a solution of the problem in well-organized co-operation, and by well-organized we mean not only from a merely business point of view but from a view of filling a house with the right sort of co-operators. Co-operation on a dollar basis, any one coming in who can pay the price, is no better than present arrangements where the high price of an apartment has nothing whatever to do with the character and selection of tenants. There are so few places for the relatively poor but respectable professional man and his kind.

A properly qualified organizer of co-operative apartments who started out with the idea of building places that could be looked upon as permanent homes, where every tenant could be assured of the respectability of his neighbors, and the peace and quiet sought by the decent tired business man at the end of his day, would be besieged by numbers. Small apartments are wanted at modest prices. They can be built and made to yield a handsome and assured income.”

In the plate section are shown a number of small houses, interesting and varied and set in an environment of trees and foliage. Typical of the homes built in and around San Francisco.

The plates devoted to the Argonne School by Mr. Reid, Jr., illustrate the skill that he brings to bear upon the problem of the public school.

A residence by Mr. Grey in Coronado where a judicious use of the old mission style of architecture has been adapted with success by the architect.

An interesting bit of Japanese landscape art in Southern California and types of gardening of a more formal nature in San Francisco complete the plate section.
RHEIMS CATHEDRAL
NAVE, LOOKING WEST
KING'S CHAPEL, Cambridge England

CATHEDRAL, Petersborough, England
CHOIR AND CHAPEL
RESIDENCE OF G. C. REW
Coronado California
ELMER GREY, Architect
ST FRANCIS FOUNTAIN, San Francisco
ST FRANCIS WOOD, SAN FRANCISCO
H. H. GUTERSON, Architect.
RESIDENCE OF Mr. F. W. PETERS
TERRACE DRIVE
ST FRANCIS WOOD, SAN FRANCISCO
GERTRUDE COMFORT, Architect.
HOUSE ON SAN BENITO COURT
ST FRANCIS WOOD, SAN FRANCISCO
H. H. GUTTENSON, Architect
RESIDENCE FOR GARDEN HOMES CO.
ST FRANCIS WOOD, SAN FRANCISCO
H. H. GUTTerson, Architect.
RESIDENCE OF MR. FURTH
SAN PABLO AVENUE
ST. FRANCIS WOOD, SAN FRANCISCO
H. H. GUTIERREZ, Architect.
RESIDENCE OF MR. S. P. LEIGHTON
SAN LORENZO WAY
ST FRANCIS WOOD, SAN FRANCISCO
H. H. GUTTERSON, Architect.
RESIDENCE OF DR. F. H. HADLEY
TERRACE DRIVE
ST FRANCIS WOOD, SAN FRANCISCO
H. H. GUTTERSON, Architect.
PLAY YARD ELEVATIONS

SIDE ELEVATION

ARGONNE SCHOOL, San Francisco

JOHN REID, JR., Architect.
ENTRANCE

FLOOR PLANS
ARGONNE SCHOOL, SAN FRANCISCO.
JOHN REID, JR., Architect.
DETAIL VIEW OF PLAYGROUND.

PLAY YARD DETAIL.
ARGONNE SCHOOL, SAN FRANCISCO.
JOHN REID, JR., Architect.
GARDEN OF MRS. J. E. WILLIAMS
ST. FRANCIS BOULEVARD
ST. FRANCIS WOOD, SAN FRANCISCO
H. H. GUTTERSON, Architect.

SCHRIFMAN JAPANESE GARDEN, Pasadena
RESIDENCE OF MR. WILLIAM G. JOHN, SEATTLE, WASH.
ARTHUR L. LOVELESS, Architect

RESIDENCE OF MR. H. S. NOON, SEATTLE, WASH.
W. H. WILLCOX, Architect
INTERIOR DECORATION

LIVING ROOM—RESIDENCE OF MR. SIMON J. MURPHY

BED ROOM—RESIDENCE OF MR. SIMON J. MURPHY
LOUIS DU P. MILLAR, Architect
LIBRARY—RESIDENCE OF MR. M. A. ARNOLD. SEATTLE, WASH.
DAVID S. MYERS, Architect

HALL—RESIDENCE OF MR. FRANK DEMIA, BELLINGHAM, WASH.
F. STANLEY PIPER, Architect
The Contractor

Is it Covered in the Estimate?

The Five Components of Cost*

The subject "Cost Estimating" is of unusually wide scope as practically each type of contract work has to be analyzed on its own merits and is subject to special considerations. In all cases, however, the following elements enter and must be given consideration:

Financial Credit,
Constructive Skill,
Use of Plant,
Hazard,
Profit,

Financial Credit

The contractor should make a carefully prepared schedule of the amount of money which will have to be invested in the proposed work from the time he signs the contract until his final estimate is rendered, and from such schedule he must determine the amount of interest this money will cost and this amount is a proper charge against the work: If this is not done the contractor is merely contributing to the owner this amount.

Furthermore, a careful analysis along these lines will often disclose the fact that a certain piece of work requires a larger amount of money to handle it than is apparent at first glance, and such a condition might work a hardship if not disaster on the contractor in spite of the fact that all other considerations had been taken care of. It is a notorious fact that on certain types of contracts, pay for preliminary work, which may be a large item, cannot be secured through the medium of the regular unit prices until the work has progressed well along to completion.

Constructive Skill

Contractors engaged in business are entitled to receive compensation in the shape of an annual salary for personal services rendered and it is our belief that any computations of cost should include sufficient amount to cover such salary whether it be that of a single individual or various members of a partnership or corporation. If this is not done the contractor is contributing his services to the owner without remuneration, because by no stretch of the imagination can there be any rightly considered profit except as over and above a reasonable salary allowance to the contractor himself.

Hazard

Many specifications include clauses which contemplate making the contractor assume risks which should properly be borne by the site, or in other words, should be at the owners’ risk. In making a proposal on such work the contractor has two alternatives—one to protect himself in his proposal against such risks by special provision in his proposal, or secondly, to put a large value on any possible risk which he is asked to stand.

It may be well to add in this connection that while it ordinarily behooves a contractor to be somewhat of an optimist he can well afford to be a confirmed pessimist when figuring this portion of a contract. It is possible this fact more than any other has caused good firms to have to go out of the contracting business.

Profit

As to the necessity of a profit we can all be agreed. As to the amount which must be added as a percentage on the cost, differences of opinion will exist, but it must be remembered that the contracting business is a particularly hazardous one; that it is irregular in volume and that every contract will not necessarily be profitable.

Furthermore, it must be remembered that the average merchant sells goods from his shelves at a profit with a definitely established cost for the goods themselves. The manufacturer sells on short term contracts—his overhead, plant installation and plant maintenance costs are established and regular, and while he may not in all cases be willing to admit it, the manufacturer is practically working on a cost plus basis today. The only difference in most cases between his method of fixing prices and that of a cost plus construction contract is that the manufacturer can and does add a larger profit for the use of his organization, brains and energy. The contractor must provide his plant, must guess at the cost of it, in place, must guess at the operating cost, must guess successfully if he is to stay in the business as to what the labor market will be, and if he is willing to do this he is surely entitled to a fair margin of profit.

Necessary Factors in Estimating

The following items also enter into most work and must being considered in detail before the preliminary cost of a piece of work can be considered as complete:

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<th>Interest</th>
<th>Hauling Materials</th>
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<td>Overhead Expense</td>
<td>Supervision</td>
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Insurance—
Employers’ Liability
Public Liability
Fire Insurance
Special Risks
Freight on outfit to and
from work
Moving in and out
Land Damages
Camp and other buildings
Preliminary work
Cost of materials plus
freight

Loss on Board
Transportation of Labor
Toys
Plant Rental
Supplies
Running Repairs
General Repairs
Special
Machinery
Fuel and Power
Water

Taking up these items in order we will comment briefly on each:

Interest.—This is covered in our discussion of financial credits.

Overhead.—A contractor should establish the proper cost of the overhead charges in his business. This should include the charges, salary allowance for members of the firm, traveling expenses, etc. Provision should also be made here for the maintenance of an equipment storage yard.

Bonds.—No comment should be necessary here on this item.

Insurance.—It is not necessary to make a discussion of the ordinary items but we wish to call attention to the fact that prudence would require that any combustible material, together with camps, storehouses, etc., should be insured and such insurance is of course a proper item of cost to the work. There are often special risks which occur upon a job which may be protected by insurance, and such insurance is also part of the cost.

Freight on Outfit.—This is possibly a portion of the item following but we have listed it separately because we believe that many contractors under-estimate the amount of freight that they will be required to pay on their outfits in such cases.

Moving In and Out Expense.—This is an item frequently overlooked by contractors but one which requires careful consideration. First, there is expense of loading outfit in the contractors’ yard; second, the unloading of it at point of destination; third, the moving of it perhaps many miles across country; fourth, the setting up and getting plant to operate, and the reverse of all these operations until the plant is again delivered in the contractors’ yard.

Land Damages.—This is an item which we believe many contractors neglect entirely and still it is one which costs considerable sums of money. This seems particularly true in connection with county road work.

Land damages accrue from the use of property for camping purposes, from moving outfits across fields for the diversion of public highways and for storage yard and other construction layout.

Camp and Other Buildings.—This is another fruitful source of under-estimating by contractors, often in the loose assumption that “The boarding house will pay for the camps.” If such a condition ever existed it must have been a great many years ago and we believe that present-day conditions necessitate including the cost of all camps and temporary buildings required to carry on the work. We further believe that contractors should be careful to avoid the thought of high salvage values to avoid subsequent disappointment.

Preliminary Work.—This is an item which should not only be considered in cost estimating but we believe that we should digress from the subject for a moment and call attention to the fact that it is probably a duty which every contractor owes to himself to work out a definite scheme of handling a piece of work before he proceeds with an estimate. This does not mean that he must detail the laying out of an entire piece of work but that he must see clearly that a certain general line of procedure can be followed with expectation of proper results thereafter.

Cost of Materials.—Mention is made of this particularly to emphasize the fact that a cost estimate is usually based on certain material quotations, and it is very necessary in these times that a prospective bidder should be careful to be properly covered with material quotations when making a bid and to close up promptly with the material dealers after the award of the contract.

In connection with this comes a question of freight which must not be overlooked but in case of the present railway situation it would seem necessary for every bidder to make special provision in his proposal to protect against a change in freight rates during the time of the work.

Hauling Materials.—All hauling costs should be very carefully analyzed, as they are often a fruitful source of under-estimation.

Supervision.—Care should be taken to see that any computation of labor also includes any supervision which is not covered in the item of overhead. This would usually mean general foremen, timekeepers, labor agents.

Labor.—Labor is perhaps the most difficult item in the computing of cost which a contractor has to deal with. Rates have been rising for several years and it is apparent that wages have not reached their peak. Provision must be made somewhere to protect against what the bidder considers the maximum rate which will accrue during the life of the contract.
Loss on Board.—In most cases there is a definite board loss in connection with camps. While this may not be true with large camps, working through a considerable period of time, the small movable camp such as is in vogue on highway work usually contributes a constant loss to the work.

Transportation of Labor.—This is an item very often neglected, yet it is very common to have to advance railroad fares to laborers with the resulting increase in the cost of the work.

Tools.—Contractors often fail to make the proper allowance for tools. Careful analysis of work done will show that a tool item is a very appreciable one in every contract and will also indicate that tools do not carry any too well from job to job, but that there is a definite and heavy loss on every job in connection with this item.

Plant Rental.—As mentioned before this should be covered by special paper.

Supplies.—This is an item which is often neglected as being a minor consideration. On certain classes of work it is really, instead, a very heavy item. The cost of packing, grease, hose, rubber boots and other rubber goods, should be given careful consideration and the contractor will save himself money by checking up his past work and arriving at a clear understanding of what such costs really are.

Running and General Repairs.—These should be discussed in connection with the use of plant, of plant rental, but in any case the contractor must understand that they are necessary parts of the cost of doing a piece of work.

Special Machinery.—On many contracts it is necessary to employ in addition to an ordinary contractor’s plant some special form of machinery either purchased from a manufacturer or built by the contractor for the work. In either case plant rental is not a proper charge for this class of equipment.

The entire cost of it less its scrap value must be charged to the one job on which it is used, otherwise a contractor may complete a large amount of work and find the entire profits tied up in machinery which has little value other than scrap.

Fuel and Power.—The cost of power especially varies so much in different localities that the bidder should acquaint himself carefully with the local conditions. If a large amount of fuel is involved careful allowance must be made for the hauling and handling of same.

Water.—This item often becomes a serious obstacle to the proper handling of work and is one that requires a great deal of attention. It sometimes adds very materially to the cost. In addition to this we wish to impress all contractors with the desirability of investigating the available water supply in connection with a given piece of work before making their figures.

Conclusion

We cannot close the discussion of Cost Estimating without dwelling for a moment on the question of Cost Keeping. The fact that so many contracting concerns are closed out of business each year is a strong indication that something is not correct with the way construction work is figured. A good deal of it comes from neglecting a number of items which we have mentioned above and which do not appeal to some men as being of enough moment to give direct consideration to when making figures. Other trouble comes from not keeping careful cost data of work done and analyzing such costs.

It is not the purpose of this paper to go into detail regarding such things, but we believe that a contractor should avoid using manufacturers’ statements of operating costs as well as any other stop-watch methods, as they usually spell loss if not disaster. A certain amount of work done per day with a crew operating at a certain expense per day never means that the division of that daily cost by that daily output is the unit cost of the item in question. There are delays and other things which so affect this price that it may be over one-hundred per cent out from the actual cost when all things are taken into consideration.
SAN FRANCISCO CHAPTER AMERICAN INSTITUTE OF ARCHITECTS.

April 15, 1920.

The regular monthly meeting of the San Francisco Chapter of the American Institute of Architects was held on Thursday, April 15th, 1920, at Tait’s Cafe, 168 O’Farrell Street.

The meeting was called to order at 12:30 P. M. by Mr. Sylvain Schnaittacher, the President.

MINUTES.

The Minutes of the meeting held on March 18, 1920 were read and approved.

STANDING COMMITTEES.

S. F. SUB-COMMITTEE ON COMPETITIONS: No report.

RELATIONS TO BUILDING CONTRACTORS: Mr. Mooser reported that notices had been sent to all Associations to appoint delegates to a conference.

GENERAL BUSINESS.

COMMUNICATIONS: From the American Institute of Architects enclosing schedule of delegates mileage and credential cards to the Convention to be held at Washington, D. C., May 5, 6, and 7, 1920; from Minnesota Chapter relative to the consideration of local problems of the profession throughout the country; from the Architectural League of New York relative to subscriptions to the Architectural League Year Book; from National Housing and Town Planning Council inviting the appointment of Delegates to attend and take part in the coming Inter-Allied Housing and Town Planning Congress; from the Southwest Builder and Contractor regarding California Housing and Building Institute; from Mr. John Bright, Chairman of the Committee on Public Information of the Philadelphia Chapter, A. I. A. relative to a resolution adopted at a Special Conference of the Associated General Contractors of America.

NEW BUSINESS.

Mr. Coxhead reported the election of Mr. Arthur Brown, Jr., to membership in the Institute of France and moved that congratulations of the Chapter be extended to Mr. Brown.

Election of Delegates: The following were elected delegates to the next convention of the Institute to take place in Washington, D. C., May 5, 6, and 7, 1920: Messrs. W. B. Faville, William Mooser, George W. Kelham, Ernest Coxhead, Arthur Brown, Jr., John Galen Howard, John Reid, Jr. and Sylvain Schnaittacher, and Morris M. Bruce, the two latter being delegates ex-officio.

Mr. Edwin Bergstrom of Los Angeles, described conditions in the Southern California Chapter where weekly Director’s meetings, and bi-weekly committee meetings are held. Committees are large to cover entire membership. He expressed hopes for closer association between the two Chapters and described his Chapter’s custom of holding Chapter meetings out of town at interesting places and suggested joint meetings between the two Chapters, somewhere between San Francisco and Los Angeles. He also touched upon the Southern California Chapter’s efforts in Chapter and Institute advertising.

ADJOURNMENT.

There being no further business before the Chapter, the meeting adjourned at 2:30 P. M.

Subject to approval — — 1920.

MORRIS M. BRUCE, Secretary.

WASHINGTON STATE CHAPTER AMERICAN INSTITUTE OF ARCHITECTS.

259th Meeting.

Minutes of the 259th meeting held Wednesday, April 7, 6:30 P. M., at the Blue Bird Cafe.

Present—25 members.

The chapter had as its guests of the evening, Mr. Arnold, President of a new chapter of the National Fire Prevention Association, recently formed in Seattle; the secretary of the association, Captain Stanslo of the Fire Department; and Mr. Moore, the Director of Manual Training of the Seattle Public Schools.

Minutes of the previous meetings were read and approved without correction.

The Secretary read a number of communications, one of which was from the Institute relative to the exhibit to be held in Washington during the Convention. Following the reading of the letter from the Institute, Mr. Willcox moved that the arrangements for the participation of this chapter be left to the Exhibition Committee. The motion was seconded by Mr. Baeder. Mr. Willatsen objected to the form of the motion, due to the financial arrangements which had to be made, and wished to have a special committee appointed to handle the Washington exhibit. Mr. Wilcox suggested a substitute motion: "That the financial arrangements be left to the Executive Committee and that the Exhibition Committee handle the Washington exhibit." Some discussion followed on the method of bearing the expense of the exhibit, which, according to the Institute’s communication would be at the rate of $2 each for every Institute member in the chapter. The report of the Exhibition Committee having not been heard, Mr. Baeder moved that the question before the House be laid on the table, which motion was carried.

The President then called upon Mr. J. E. Blackwell, recently appointed Superintendent of Buildings, City of Seattle, for some remarks. Mr. Blackwell stated that he had not as yet formed any definite policy, but was making a thorough investigation and study of the work of his department, and desired to have the help and suggestions of any of the chapter members in connection with his work.

The report of the Exhibition Committee was made by Mr. Willatsen, chairman, who desired to call the chapter’s attention to the fine work which had been done by Mr. R. M. Hoffman, the landscape architect, in the laying out and arranging of the settings for the exhibit. Mr. Willatsen moved that the chapter express its appreciation to all those who assisted in the success of the exhibit.

The motion being seconded, it was carried. Mr. Wilcox moved: “That the report of the Exhibition Committee be presented, and that they and the special committee of ladies be given a vote of thanks for their work.” The motion was passed, and the Secretary was instructed to write letters of thanks to each of the non-chapter contributors to the exhibit. Mr. Baeder then moved that the subject of the Washington exhibit be taken from the table, which motion being seconded was carried. Mr. Wilcox then moved that his former motion: “That the financial arrangements be left to the Executive Committee and that the Exhibition Committee handle the Washington exhibit” be reconsidered. The previous motion was then put and carried.

The Committee on Institute Affairs, Mr. Huntington, chairman, reported in reference to the expense of delegates to the Convention, and he moved that in accordance with the usual custom of the chapter, $300 be appropriated for expense of delegates to the Convention. The motion being seconded by Mr. Wilcox was passed. Mr. Huntington called the attention of the chapter to a communication from the Minnesota chapter containing a resolution of considerable length relative to Convention matters, and it was resolved that consideration of this be postponed until the meeting of the chapter called for the consideration of purely Institute matters.

Mr. Bullard called the attention of the meeting to the very interesting exhibition being held at the Tacoma Fine Arts Society, and invited all members to view the exhibit.

(Continued on Page xi)
THE BUILDING REVIEW

MARCH, 1921

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BUILDING REVIEW

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Business Manager—E. D. MCDONALD.

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“This is the forest primeval
The murmuring pines and the hemlocks”

When man builds himself a home in the city—he obeys man-made laws. When he builds in the suburbs, he observes Nature’s laws also. Such was the problem solved in this particular instance.

The architect was fortunate in the background Nature had prepared for him. His treatment of the exterior has been pleasing. Likewise, the interior, for which he chose

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It was a gay crisp morning as we sped westward through the closely built-up streets of San Francisco toward the ocean. Spring was in the air and within ourselves even more certainly, marked by a longing for and an awakening sense of the beauty of living away from crowded city conditions. We talked, as so many were beginning to talk, of building plans, of gardens, views and color schemes; listening with anticipation to the assurance from the driver that our commonplaces were drab in comparison with what we traveled toward. Our little journey promised well.

A turn in the city street brought us face to face with a panorama never to be forgotten. A vast expanse flanked by rolling hills dotted with forest and lightly shrouded in thin veils of mist. Opposite our vantage point, lovely Mt. Tamalpais stood out clear against a cloud-rimmed sky. Far down below us was the shimmering water of the Golden Gate Strait. To the east the entrance to the unsurpassed harbor, guarded by its old fort on the point. To the west a rugged coast fading away to the horizon on the Pacific. The whole picture vibrated with life—gulls, a fishing fleet returning home, a steamer clearing for the tropics, and that sparkling, dancing water accompanied by the detonation of the surf on the rocks below.

We stood spellbound with the beauty and suddenness of it all. Were we, indeed, still in the city? Turning to make sure, we saw the proof—an urban trolley car at the gate of a great park wooded with evergreens—Lincoln Park, where the municipal golf links, equestrian ways, inspiring trails and the sea air invited one still farther away from business cares. This was indeed a setting for a home. And there was an enchanting one at our feet; yes, and others beyond! What could be more fascinating and unique?

The first house proved to be the home of Mr. and Mrs. M. B. Moon. It rested on the very edge, anchored
firmly to the cliff and the city street by a high garden wall. On the south or street front, one was held just slightly aloof by a dense cypress hedge, head high. Through it opened the two entrances, the one open for cars entering the double garage and for service and deliveries through a low arch alongside; the other barred by graceful wooden gates painted an ultra-marine blue and hung on well designed masonry posts. On opening these gates we had the first real introduction to the spirit of romance and colorful beauty that must have prompted both architects and owners in their work. A charming, simple, formal garden, secluded and yet playing such an important part in its invitation to the guest.

The problem involved in the house, we were told, was complicated because it was an alteration. This, however, was only one of the difficulties to be surmounted as we saw the problem. The cliff, the restricted fifty-foot frontage, the fact that the all-important view was toward the north—all these things immediately came to mind as factors to be considered. It is not now apparent what was old and what was new, so that the alteration, as an operation seemed successful. As to the other problems, what could be more natural, livable and graceful than this descending garden giving access and seclusion, sunlight and foreground to the principal rooms on main and bedroom floors? The brick paved walk and steps leading down to the front door warned the grey concrete balustrade around the marble fountain set in a lawn in front of the drawing-room windows—a very dignified, simple scheme in fine scale with the rather small, intimate house. It typified the consistent endeavor throughout to offset the gyness of the occasional periods of foggy weather. This morning in the bright sunshine the warm, maroon-tinged, stucco walls, topped with a fine bold variegated Spanish tile roof, the door, the garden and even the sparkling, noisy water in the fountain was cheeryly recalling the great cliffs and water below. In fact, the whole color scheme is taken from the cliff and water—the plaster matching the earth color exactly. The front door is done in polychrome—yellow, light green and burnt orange with hood lined with panels illuminated with colorful stencil work flanked by iron grilles. Opposite the entrance door is the only opening in the west party line wall, giving a vista and a bit of late western sunshine onto the door step.

The interior gave us at once the sense of refined quality and completeness. To the critical eye, the furnishings lacked great originality, but, on the other hand, all was most finished in appointments, expressing consistency, comfort and thoughtful care. The scale, proportions and colorings were, on the exterior, most harmonious. The wall and ceiling treatments, except for the dining-room (entirely in Circassian walnut), were neutral colored, heavily painted, canvas surfaces with an interesting texture built up of several colors, but all maintaining a unifying similarity; darker in the library and lighter in the bedrooms. The dining-room with its great commanding bay window and oval wood ceiling was particularly dignified in its furnishing.

But the perfect day impelled us to look out and realize the raison d'être of the whole happy scheme. Each room had full vantage of the panorama through well placed windows and each in such a different way that there was no monotony. True, this variety has been achieved somewhat at the expense of the composition of the rear facade. The principal rooms looking to the garden and the sun
received most adequate light. On the stair landing, midway between first and second floors, a door opened into the garage! An astonishingly unique plan, this, but one of great convenience. There was a noticeable lack of excess minor rooms—no breakfast-room, sun-room, dressing-room—which gave the plan the true character of a small house instead of a reduced, large house. This was most gratifying and doubtless made for directness and simplicity of living arrangements. A study of the plan proved of interest, especially when we bore in mind that the original house had a little used library where the garage now is and that the second floor was then the one really livable portion of the house because the former living-room opened only to the north.

As we walked up again through the little garden a feeling of friendliness came with us and we congratulated those who had so well collaborated in the making of this real home.

A short walk down the slope gave us a better glimpse of a gay little villa set midway between surf and street. For all the world it was like a retired mariner’s haven with tiled promenade commanding the strait, with flags flying and domed telescope on the roof. Fanciful, perhaps reminiscent of foreign ports, it was too new to have become properly a part of its setting, but it made up for its lack of architectural merit by its gay spontaneity and spirit.

Farther along, we were attracted by another tile-roofed house with walls of a lovely yellow-pink travertine color and most interesting texture. A frank, sturdy house, designed by its architect-owner, Mr. George Kelham, for withstanding the storms. The tiles, set with marked irregularity of color and line, softened the roof lines attractively, giving a look of age. Also the house was most delightfully weathered, with heavy, well-detailed oak shutters and paneled doors, grey as with the weather of centuries. But only as one passes the front and turns in toward the entrance on the low or easterly side does the full charm of the exterior reveal itself. Through an iron gate in a shutting wall we gained access to an entrance terrace. A walk of klinker bricks leads one between planted borders past a group of arched windows with second floor balcony to a very beautiful entrance door with stone pilasters and over door treatment paneled with sgraffito work with a background of deep pink, many shades darker than the wall, but toning with it. All is of a scale and detailed to prepare one for the interior.

As we entered, a sense of spaciousness was at once noticeable. The entrance hall extended through the house from east to west so that it had ample light from west windows. The hall was paneled in southern gum finished in lovely walnut tones, and against the fine long wall space on the right was just the proper console and mirror in well selected Chinese design. Opposite were the doors to the dining-room, which was done in a simple scheme with painted walls in panels and marble-faced fireplace without shelf or over mantel. A perfect scale model of an old Back Bay ship and a quaint oil portrait gave notes of distinction and individuality to the room. A refined, conservative, restful room it was, well suited to its purpose and flooded with sun at breakfast time. Midway in the hall, a short flight of easy steps lifted the floor level to that of the living-room. From this level rose the simple, dignified main stair with carved newell and turned spindles ending in a balcony rail at the second floor.

Through a well designed doorway access was had to

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DETAIL OF MAIN ENTRANCE
RESIDENCE OF M. B. MOON.
BLISS & FAVILLE, Architects

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the living-room, a most distinguished, restful and beautifully appointed room done in the Italian manner. Its most notable feature was its great ceiling height, to which its other proportions were in fine harmony. Also the skillful use of a walnut-colored, paneled, gum-wood wainscot, about eight feet in height and in rather strong contrast with the light colored plastered walls and ceiling beams, gave us the sense of intimacy, as does a low ceiling, and also the freedom and distinction of the high ceiling.

The walls were sand finished, painted in colors, blended to a neutral, warm, clouded grey, over which was stenciled a geometric pattern skillfully wiped off sufficiently to relieve any set look. The beams were stenciled also. Opposite the entrance door was a fine travertine fireplace, well carved and furnished and supporting an interesting piece of sculpture called “Morgan,” by Edith Burroughs. Flanking it were two rectangular bay windows commanding that marvelous marine view one was never able to forget.

The west party wall was blank, affording an ideal space for a rich and rare tapestry cartoon painted in the ancient manner on fine canvas; an old chest and two fine high-backed Italian chairs. The east wall had a three-sided bay window in which a quaint old mahogany desk was placed. At either side were book and music cases.
long the south side was again a spacious wall surface against which was set a grand piano. Over it was a most scintillating wooden balcony opening from the second floor sitting-room. From it hung a rich prayer rug, giving excellent color harmony with walls and furnishings. A well designed refectory table on which was a beautiful lamp, lighting both floor and ceiling, was centered on a large Oriental rug. These, together with an overstuffed divan and other smaller pieces, completed the room.

We lingered there long, enjoying its peaceful, quiet, richness—its views over the formal, inclosed court yard with its wall fountain, to the blue waters and the pounding surf on the beach.

This room was indeed the chef d'oeuvre of the house, and after noting the fact that the well appointed second floor and service rooms supported it adequately, but, again, without any superfluities, we went back to it for one last survey. What an atmosphere to carry in memory each way to the crowded, noisy city and to return home to at night for rest and inspiration!

Our return to the city was marked by considerable reflection about and enthusiasm for the joys of being a cliff dweller—or, for that matter, an owner of an attractive suburban or country home in any well chosen locality. The spring air was still at work.
The trouble with California is, we have so many assets it is hard to compute them. There is more tillable acreage in this state than in the whole of France, which has sustained forty million people for centuries, while we have but three million here.

We face the problem of being over-advertised but under sold. What is needed is the plain truth, rather than sugar to catch flies. Every Californian is a potential booster, but we don't need to establish a swimming school for gold fish. There is a right way to tell the truth. John Muir, the great Scotch-Californian scientist said one day to his friend William Keith, the equally famous Scotch-Californian artist, “Willie, as I crossed the bay this morning Mt. Tamalpais looked almost like your picture of it.” “Nature is looking up,” answered Keith. But fine artist as Keith was, he declared that it was impossible to paint the great monuments of nature of which the West is proud—Yosemite, King's River, the Grand Canyon, the many other wonders which bring joy and despair to an artist's heart.

The idea of boosting California now appears to have been taken up by the Realtors. That the world generally discounts a Realtor is well known. However, we know our Realtors and will back them up. They cannot exaggerate our values, and at the same time we can cheerfully admit that Realtors made Los Angeles. That is not the question; our problem now is to resolve that all California will tell the world what we have to sell.

Let us advertise our merchandise; let us tell the truth. Let us admit that wooden nutmegs and gold bricks are not on our shelves and that they would be drugs on the market in comparison to our genuine articles.

Let us set forth without fear or favor that our articles are Simon pure, all wool, a yard wide and dyed in the cloth. Let us guarantee our products. Let us prove that the rewards of thrift, industry, frugality and fair dealings are ours and that we are willing to share with all who join us. But let us not forget that the prosperity of all cities is inextricably coupled with the prosperity of the State; therefore “California, first, last and all the time,” should be our slogan.

“California, where the spring is in the autumn,
The autumn is in the summer,
The summer is in the winter,
And there ain't no winter at all.”

Every city has its Montagues and Capulets. Ours has its rival Improvement Clubs and District Associations. They should be drilled to do team work. One of the elementary rules of Auction Bridge is “never overbid your partner.” Just let that sink in. San Francisco should let Los Angeles alone; she is a partner; don't kick if she has done most of the work so far in advertising our assets.

Remember one of James Whitcomb Riley’s poems:

“He's all stove up with rumatiz,
There haint no shine on them shoes of his;
His hair aint cut—but his eye teeth is.
He aint refined, as he ort to be,
Nor his clothes don't fit him—but he fits me!”

These general remarks fit every business. I am especially interested, and best acquainted, with the building business. Its future looks rosy, general business depression must soon end and its end is in sight. It will be followed by a literal boom in building.

Industrial depression, invariably coupled with deflation came, placed its blight, and is now about to tip the hats on and depart. We must speed the parting guest and prepare ourselves for the new era. The one outstanding aspect of the situation is the present shortage of housing—domestic industrial and commercial—the building business must supply this deficiency and is therefore destined to become tremendously active. First it must regain public confidence by putting its house in order. Capital is like a turtle, it withdraws into its shell if menaced, but like the tortoise it can outdistance the proverbial hare when its course is clearly defined.

It is now squarely up to those engaged in the building business to interest capital in prospective investments by proving that all elements of excess cost of material and loss of efficiency of labor have been or will be eliminated.

Labor must realize this and do its part; but the real canker sore most needing treatment is the so-called Cost Plus System.

Under this method, the efficiency of labor declined some think as much as 50 per cent, certainly it is a system that puts a premium on incompetence, demoralizes discipline and terrifies capital. Instead of being a sore need, treatment, indeed a capital operation may have to be performed, anyway cost-plus is an incubus upon the building business and its vogue is on the wane.

Prior to re-establishment of complete confidence, capital must be shown that exposures the country over of price fixing in certain cases, are not indicative of a widespread combination comprising the building business as a whole. We must return to methods upon which the laws of barter and sale were founded. We must get back to sound fundamentals, with both labor and capital doing team work.

And don't forget that it is good business for every one to make a city attractive.

In 1902 the Commercial Club of Chicago asked itself: “What can we do for Chicago?” The Club had created a morale among its membership, of which each member was boasting, and the more they boasted, the more they wanted in a spirit of business conservation, to justify their boasts. They boosted Chicago, they boosted themselves as individuals, they commenced to feel their power, and realizing what it was, they commenced looking for wise ways in which to employ such power.

They formed the Chicago Plan Committee.

They proposed to make a cold-blooded-matter-of-fact plan for the expansion and development of Chicago along material lines.

This proposal, notwithstanding that it emanated from the safest and sanest business men of the community was received with indifference.

It was ridiculed by the press.

It was viewed with unconcern and treated with scorn by the politicians.

And last, but not least, it did not interest the general public.
THE BUILDING REVIEW

In other words it had to prove itself right beyond all argument. This it has done, and now Chicago, after 25 years, has learned that public weal and private interest are practically identical. At first some of the Commercial Club members had their misgivings, some of them, if ever, would not have supported the Club, but under that long leadership the timid ones stayed in the fights, and ready Chicago under this impulse has emerged from the condition of being one of the most uninteresting and unattractive cities in the world, to a condition that is rapidly taking her one of the most attractive cities, and is finding it to its immense satisfaction that it has made a good westward.

All this effort resulted in the "Plan of Chicago" as prepared by the Commercial Club of Chicago.

The Chronicle's Plan for the improvement of the Sutro ocean Front Park properties prompts me to observe that while no other place in the world approaches San Francisco picturesque charm, no other place in the world has paid little attention to the preservation and adornment of its natural advantages.

The improvement of the Sutro properties is only a link in a chain of betterments included in the report of the late J. H. Burnham as covered by the so-called Burnham Plan of San Francisco. Mr. Burnham devoted the better part of the last twenty years of his life—during the very peak of his mental powers—to a calm analysis of city planning problems.

He accumulated an unsurpassed amount of reference documents—all kinds of surveys, as well as accurate historical facts relating to the growth of cities from ancient times to the present day, the evolution and solution of their practical problems of circulation, trade, commerce and artistic adornment—all designed to give fame and thus contribute to the material and commercial welfare as well as add to the political power of a community.

Mr. Burnham's book on the Plan of San Francisco is well worth studying. His many other works, especially his book on the Chicago Plan, said to have cost $150,000.00 to produce, are all available for study. Chicago, Cleveland, Washington and many other cities are rapidly bringing to practical use the dreams that Burnham dreamt for them. Why should not San Francisco realize some of these dreams?

We have a City Plan Commission, under it our City Engineer is making a plan for future development of the City. He is earnest and industrious. I hold him in the highest personal esteem—he is a competent engineer, but is he an expert city planner?

Charles Moore of Washington, D. C., Chairman National Commission of Fine Arts, for twenty years actively connected with city planning projects, paid a special visit, about two years ago, to San Francisco to go up on the Twin Peaks in the foot steps of the late J. H. Burnham so that he could visualize some of Burnham's dreams for San Francisco. We then went to the City Engineer's office and were shown the plans being made.

Mr. Moore asked where the Burnham plan was. "Oh!" they said, "It's up in the file room." Mr. Moore said "Why don't you put it up on the wall here and let it talk to you?" Phidias, blinded by a blind administration, cruelly blinded with red hot irons, then imprisoned, cast into a dungeon, his sight destroyed, but his soul exalted, his eyes put out but not his vision, his body imprisoned but not the children of his brain, illustrates the fate of the Burnham Plan of San Francisco, which rests unheeded in the file room of the City Engineer's office in the oblivion to which it was consigned by our blind administration. You cannot expect more from your city government than its combined ability is capable of giving. The Chicago Commercial Club found that out and took matters into its own hands.

That is what we ought to do for ourselves. We ought to get the Commercial Club of Chicago to tell us how to do it.

It would be the soundest kind of business policy—the expense of any proposed improvement, instead of increasing the tax rate would increase the assessment roll.

How can you estimate the value of time? The telephone, telegraph, cable, wireless air mail plane, rapid transportation, increased facilities of traffic, such as bridges, etc., are an intangible asset, they possess a commercial value impossible to estimate.

That is an element in City Planning.

We have by nature the most picturesque site of any city in the world, but we are so used to it that we don't appreciate it.

I have seen the famous water fronts of most world cities—Naples, Genoa, Venice, the quays of Paris, the Thames Embankment in London, but no where is there such a prospect as ours, the Marina, the bay, the Marin Hills, are they not beautiful? Think of them—shall we allow any of them to be lost to us? Shall we allow the Marina to revert back to the shambles, at its present conditions?

Paris and its slums of the 17th century, and then London exceeding in squalor all other cities in its pre-Chris-

topher Wren days, are now, in point of attractiveness, the marvels of the modern world. San Francisco's task in comparison is simple. Chicago, London, Paris, had nothing to begin with—San Francisco has everything. The trouble here is that we detract from rather than add to our incomparable heritage.

Our public work is not co-ordinated. The development and improvement of the city as a whole is under the direction of divided control. The War Department, the Harbor Commission, the Park Commission, the Supervisors, the Board of Public Works, to say nothing of private real estate promoters, all work independently of each other and none of them conform to a common plan. Maybe Boss Shepard was a rector, but he made Washington; maybe Baron Haussman was a speculator, but he made Paris.

San Francisco doesn't need a boss, but it should adopt a plan and follow it.

Pericles, not for art's sake, but as a matter of pure statesmanship, made Athens beautiful, and Greece for more than 2000 years has been collecting the dividends.

As Mr. Burnham said: "Make no little plans; they have no magic to stir men's blood and probably themselves will not be realized. Make big plans, aim high in hope and work, remembering that a noble, logical diagram once recorded will never die, but long after we are gone will be a living thing, asserting itself with ever-growing insistency. Remember that our sons and grandsons are going to do things that would stagger us. Let your watchword be order and your beacon beauty."
California represents wonderful opportunities for the development of a remarkable highway system, and, in connection with this subject, it would probably be well for us to consider what has been done and what it is possible to do along these lines.

When our forefathers crossed the plains in their mad rush for gold into the West and into California, this movement brought to California a people who foresaw the richness of our mountains and the fertility of our valleys, and it is a remarkable fact that within a few years they transformed much of our State from a barren waste into a land of paradise and flowers. Naturally, the lumbermen and the miners remained in the mountains with the timber and the streams,—the ranchers went into the lowlands with their rolling hills of greenery,—while the farmers took to the valleys with their smelting heat. Seaports started along the coast. The summers brought intense heat into the valleys, and along the coast the winds came up and the fogs rolled in. In order to safeguard against these climatic conditions, windbreaks along the coast and shade trees in the valleys became an extreme necessity. The next generation saw our hills clothed with trees, and the roadways of our valleys provided with shade trees. Trees were brought from different climes—principally quick growing, in order to get the immediate results so as to make our state habitable and to produce the richness which our forefathers foresaw. The Eucalyptus in its many varieties was brought from Australia, and, together with our native Monterey pines and cypress, afforded excellent windbreaks. The Texas Umbrella, the Poplar, the Cot-

*Of MacRorie-McLaren Company.
ONE OF THE BEST EXAMPLES OF HIGHWAY PLANTING IN CALIFORNIA.
SCENE NEAR MILLBRAE, SAN MATEO COUNTY
tonwood, the Elm, the Pepper, and several varieties of palms were introduced, and were planted for quick effects as avenue trees, so, as you see, our forefathers provided a skeleton of plantings as a necessity.

We may often see through our great State of California, many examples of plantings, not only along our present highways, but in more-or-less isolated farmsteads, beautiful specimens of trees and shrubs which have been planted forty to fifty years ago; but it appears that the intervening generation has neglected to do what should have been done along these lines. In the last few years, however, there has developed a tendency to improve the ranch farm which has naturally tended to improve the state highway.

We of today must improve on the plantings and ideas of our ancestors and make of our highways things of beauty. Let us plant trees which many years of experience have taught us are best adapted to the climate of a particular locality. As we all know, California stretches over two extremes—from the frozen north to the torrid south; and this affords us the use of plant life from all corners of the globe. This very condition, with appropriate planting, should make our state a place of wonderment, as no other state has this double advantage. We should bear in mind that the planting of trees along our highways should conform with the natural surroundings so far as is possible. How many times do we see a straight line of plantings from our natural hillsides regardless of contour? Do we ever stop and consider how much more pleasing the effect would be if these same plantings were irregular, and carried out in points and bays with an occasional specimen tree intervening? Naturally, many of these plantings were placed along property lines and for protection; but now that they have attained their height and have served their purpose, there is no reason why the straight lines could not be taken off by additional irregular plantings.

We often drive down our large avenues and see a palm here, a pepper tree there, an elm, or an Australian Eucalyptus, as each owner of a lot has shown his preference to a certain variety of tree. How far more noble and impressive would the driveway be if it could be accentuated with some definite planting carried out by stately trees set at equal distances apart, carrying the eye along a vista centered on some structure or landmark! What is more picturesque or stately than our highway between Milbrae and San Mateo with the tall stately Eucalyptus tannifolia alternated with the Cork Elm and backed up by our native pines and cypress? This planting serves the double purpose of shade and windbreak. These trees were planted fifty years ago at the instigation and expense of Mr. D. O. Mills, Mr. W. H. Howard, and Mr. Alvinzo Hayward, who probably had visualized the future of the driveway and what was at that time known as the “County Road.” The same scheme may be carried out in various ways, and on this scale let us picture an avenue of scarlet hawthorne alternated with black acacias or with horse chestnuts, while we might use on the same scale, camphors, grevillias, acacias or magnolias, which would provide a season of color and everlasting foliage, which we in California have an opportunity of obtaining. Our long summers and pleasing winters give us the possibility of occupying our country homes practically all the year round, so, instead of having deciduous trees predominate, let us use, as much as possible, evergreen trees and shrubs which will give us a substantial and pleasing effect all the year round.

We in California are a little bit too anxious for quick effects, but we will find that by proper selection, and with good judgment, we may obtain the same quick effects by judicious planting of trees and shrubs; utilizing the large deciduous plants with evergreens interspersed, and in time to come, gradually eliminating the deciduous plants and leaving the evergreens as permanent plants.
RESIDENCE OF M. E. MOON, SAN FRANCISCO.

GARAGE WING

BLISS & FAVILLE, Architects
RESIDENCE OF MRS. GEORGE W. KELHAM

EASTERN FACADE

GEORGE W. KELHAM, Architect
RESIDENCE OF MRS. GEORGE W. KELHAM  LIVING ROOM  GEORGE W. KELHAM, Architect
LIVING ROOM.

RESIDENCE OF MRS. GEORGE W. KELHAM, SAN FRANCISCO.

GEORGE W. KELHAM, Architect.
LIVING ROOM.

RESIDENCE OF MRS. GEORGE W. KELHAM, SAN FRANCISCO.

GEORGE W. KELHAM, Architect.
Balfour-Guthrie Building, San Francisco

Entrance Lobby

George W. Kelham, Architect.
Up till very recently the only oriental arts that attracted the attention of art dealers and collectors were the products of China, Japan, British India, Siam, Korea and Persia. For some unknown reason lovers of the antique in art passed by the creations of the people of the Dutch East Indies, and neglected to explore such places as Java and Borneo, where an extensive and original civilization flourished for many centuries, and where a large cultural development was known to exist.

Perhaps one of the main reasons for this neglect was that the Javanese for the past one hundred years or more have let their art instincts deteriorate, and have failed to produce such specimens of the beautiful in metal work and wood carvings as characterized their efforts previous to the period when the decline in art set in.

During the 16th and 17th centuries these brown people isolated from the rest of the world, worked independently, and contributed some really worth while decorative art to the world, with highly suggestive and original features, as an examination of some of their best antiques will disclose. The explanation of this period of production was that the Javanese seemed to come under the influence of that great wave of art and culture that swept the Indies about four hundred years ago.

Under the guidance of native princes, as the Sultans of Soerakarta and Djokjakarta and other powers of the prolific Modjapiat Dynasty, many very wonderful objects in fabric, brass, and most of all in wood carvings, showed

*Of Vermaas & Ernst, San Francisco.
JAVANESE GATEWAY OF THE SEVENTEENTH CENTURY.

FROM THE STUDIO OF VERMAAS & ERNST, SAN FRANCISCO.

BRASSES AND SMALL ARTICLES OF THE SEVENTEENTH AND EIGHTEENTH CENTURIES.
an artistic feeling and power of expression in materials worthy of a more advanced civilization.

Using a native wood called Djattie, hard as teak and with the beautiful grain of San Domingo mahogany or camphorwood, these Javanese craftsmen with the most primitive tools, executed carvings that none of the modern carvers would even attempt, so wonderful is the design and so beautiful the tracery.

In design, as in Burma and China, the Javanese seem to adhere to a floral or scroll motif, and while it may suggest these other countries, a critical inspection soon discloses that it is distinctly and emphatically unique and individual.

Like all the immature nations, the Javanese artists seldom use figures, with the exception perhaps of some work from the island of Bali, where the fancy of the carvers seem to run towards the hideous, the barbaric and the grotesque. These efforts in a direction outside the native genius, however, are not comparable with the really beautiful creations in scroll and flowers.

One of the strange manifestations, showing the natural conservatism of all peoples, is that although the Dutch ruled Java for more than three hundred years, the native arts do not seem to have been influenced at all by European designs.

The Javanese woodwork is for the most part massive, but the writer has had in his possession many small and graceful pieces that undoubtedly should find their way into our best museums, not only because they stand for an original culture, a knowledge of which should be preserved, but also for art itself, because they reveal individual creations of the beautiful.

In the Rijks Museum in Amsterdam there is a fine collection of these carvings, including a cabinet and carved chest of exquisite workmanship.

The cabinet here illustrated was taken from the Palace of Bangalan in the island of Madoera, and the gates from the vicinity of Djokjakarta, and the writer believes them to be the only ones in America.

In collecting carvings from out of the way places in the Dutch East Indies it will be found that the native workmen have centered their efforts in the form of panels, chests, chests of drawers, cabinets, arches, gates and tables.

It is only with extreme difficulty that some of these antiques are recovered and brought to light, as they are not to be found in the shops of Batavia. The collector has to go often far into the interior to secure his prizes, but when they are found the discovery is well worth the trouble and expense, for here is something in the way of art and beauty that the centuries will preserve.
The Fletcher Bill, now pending in Congress, provides for a National Conservatory of Music, with a branch in California. The accompanying sketch is a tentative design for that branch. It is, in fact, merely a preliminary study, subject to modification or elaboration as the detail is worked out. Its purpose is to show, first, a conservatory that will meet the needs and possess the dignity of a national institution; and, second, to express, insofar as it is possible, the spirit of California.

While climatic and other conditions are such that the structure might be located in Northern or Southern California, in the valleys or on the Coast, the particular site in Berkeley for which it was designed is truly ideal. On a slight elevation, directly opposite the Golden Gate, it overlooks a vast expanse of land and water. Nowhere is there a more inspiring panorama, and within this panorama is San Francisco Bay, most magnificent of harbors, and destined in the not distant future to be the greatest.

From the site in question four thoroughfares radiate to the campus of the University of California, and the longest of these thoroughfares is two blocks. The immense facilities of the University, now the largest in the world, would thus be at the disposal of the conservatory. Of particular value would be the great library with its hundreds of thousands of volumes, the innumerable special courses available for balancing a musical with a general education, and, perhaps most of all, the intimate contact with a great body of students in an atmosphere of youthful enthusiasm and aspiration. Nor would such contact be a one-sided affair. The musical tastes and standards of the ten thousand students of the University would unquestionably be influenced for the better, and this influence would eventually extend to the remotest hamlets from which these students came.

In looking at the drawing one is supposed to be looking down from a slightly higher elevation some distance away. From that position one may observe the arrangement of the several groups of buildings, their relation to one another, the connecting galleries and courts, and the panorama of the bay beyond. The central building is a music hall. It is intentionally of small proportions, being designed to accommodate only a few hundred. It would be limited to lectures, recitals, concerts, and other student affairs in which stage practice and repertoire were the ends sought, leaving it to the theaters of San Francisco, Oakland and Berkeley to supply larger needs in opera and the drama. The rear of the music hall is shown. In this way, by opening doors at the back of the stage, the same stage and its equipment would be available for use in connection with a large outdoor theater (seen in the center) where thousands might assemble.

The studios are arranged in groups, being connected by interior galleries. Class-rooms, practice-rooms and administration quarters may be arranged as desired. Their size would vary with their character and all would be of ample proportions. This arrangement of the studios gives them an isolation such as cannot be obtained in the usual factory type of studio building, and this isolation would be increased by the use of sound-proof walls. No living quarters are provided, as such an institution should be for working purposes only.

(Continued on Page Fifty-eight)
THE BUILDING REVIEW

GENERAL BUILDING NOTES

OAKLAND FACTORY PERMITS FOR 1920

January

Bright & Miller, ice chest, 224 2nd St., Oakland; $1,500.
California Peanut Company, 2-story brick add., 20th St. and San Pablo; $8,000.
California Peanut Company, 3-story brick add., 20th St. and San Pablo; $7,500.
Chevrolet Motor Company, alterations, Foothill Blvd. and 64th Ave.; $1,000.
Union Blind and Ladder Co., 1-story factory add., Peralta and Watts Sts.; $2,750.
Pacific Coast Rattan Company, alterations, E. 14th St., bet. 36th and 37th Aves.; $1,000.
Kronke Tent and Awning Co., alterations, 313 Broadway; $150.
Novelty Products Co., 1-story factory, Lowell and 61st Sts.; $600.
Standard Underground Cable Co., steel tank tower, 1050 1st St.; $4,000.
Danbury Hat Works, alterations, 1214 Franklin St.; $200.

February

Pacific Rattan Co., 1-story furniture factory, E. 14th St. and 37th Ave.; $10,000.
Novelty Products Co., 1-story factory, 61st and Lowell Sts.; $750.
Economy Mills, 1-story brick factory, High St. and S. P. R. R. Sts.; $8,654.
Fageol Motors Co., 1-story addition, Hollywood Blvd. and 107th Ave.; $600.
National Ice Co., roof repairs, Myrtle, 100 N. 1st St.; $300.
Best Steel Casting Co., addition to foundry, 105th Ave. and Edes; $10,000.
National Ice and Cold Storage Co., 3-story cold storage plant, 1st and Market Sts.; $18,000.
Novelty Products Co., 1-story factory, 61st and Powell Sts.; $780.

March

H. Jones Co., 1-story concrete boiler house, 29th Ave. and Emberwood; $9,000.
Aluminum Products Co., 1-story add., E. 11th and 3rd Ave.; $5,000.
National Lead Co., alterations, 47th Ave. and E. 10th St.; $200.
Pacific Coast Canning Co., 1-story store, 12th and Wood Sts.; $500.
Chevrolet Motor Co., 1-story shed, Fairfield and 69th St.; $300.
National Ice Cream Co., 1-story shed, 3rd St. and Cypress; $500.
H. O. Prince Canning Co., 1-story con. warehouse, 27th Ave. and E. 11th; $61,000.
C. & O. Lumber Co., 1-story planing mill, foot Kirkham St.; $2,000.
Oakland Brewing & Malting Co., 1-story distillery, Linden and 26th Sts.; $350.
Moore Shipbuilding Co., 1-story add., foot of Adeline St.; $4,500.

April

California Pack. Corp., 1-story brick warehouse, Beach and Hal-leck Sts.; $20,000.
Crystal Laundry Co., alterations, 2307 Chestnut St.; $1,125.
Moore Shipbuilding Co., 1-story shed, foot Adeline St.; $2,500.
California Paint Co., brick add., 11th and Pine Sts.; $800.
Duner-Matheny Sash and Door Co., 1-story shed, 14th St. and 42nd Ave.; $25.
American Can Co., steel tank tower, 37th Ave. and E. 8th St.; $4,650.
Western Box Co., alts., 5th and Adeline Sts.; $500.
Baird-Ballhache, 1-story brick factory warehouse, 26th St. and Adeline; $16,000.
Parr Terminal Co., 1-story freight shed, Key Route Basin; $63,500.

INDUSTRIAL BUILDINGS

The relation which industrial building bears to building construction in general is not fully appreciated. Architects have not entered this field to any extent, and yet its size and nature certainly justify the use of trained experts.

From the owners' standpoint, there are many purely selfish reasons for employing architects. The advertising value of a substantial, attractive building is great; as a rule, there is an inseparable connection in the mind of the public between a fine building and fine goods, and vice versa.

The welfare of employees is now probably the greatest factor in efficient production. Besides provision for light, ventilation, safety, sanitation and comfort, the influence of attractive surroundings on the spirit of workers is recognized as not imaginary, but of very real importance. When factory "improvements" are made, the term is significant.

The effect of fine industrial buildings and property upon the general prosperity of a community is well known, and the increased general prosperity in turn benefits the factory owners. This is being realized more and more, and the small extra cost of architectural services has been considered well worth while, resulting in both pride and profits to owners, workmen and the public.

For example, as a demonstration of the local industrial problem, records of new factory buildings in Oakland, Cal., during 1920, have been compiled. The total cost of new building in Alameda County during last year was about nine and a half millions; over two millions of this was for factories. Here is food for thought, and an opportunity for architects to perform a function of public value, that should not be neglected.
May

Wy Engineering Co., 2-story concrete machine shop, 14th and Jefferson Sts.; $14,000.


D. Allen, 3-story concrete automobile sales bldg., 21st and Webster Sts.; $100,000.

Union Const. Co., 3-story mold loft, Key Route Basin; $30,000.


June

Barrel Syrup Co., 1-story factory, High St. at S. P. tracks; $4,000.

Uddisted Estate, 1-story con. warehouse, 3rd and Jefferson Sts.; $18,000.

Tional Ice Co., 3-story concrete ice plant, Market and 1st Sts.; $10,000.

Coast Tire and Rubber Co., 1-story concrete tire factory, 48th and 30th Ave., E. 10th and 12th Sts.; $250,000.

California Pack. Corp., 1-story 3-room nursery, 40th and Hallock; $2,000.

July

Innes-Jamieson Co., repairs and bunkers, Water St., bet. Broadway and Franklin St.; $20,000.

California Peanut Co., 3-story con. factory bldg., 20th St. and San Pablo; $73,173.

F. E. Dugan Co., 1-story warehouse, cor. of High St. and Alameda Ave.; $5,200.

Western Milling Co., 6-story reinforced concrete warehouse, Tidal Canal, bet. Ford and Boehner St.; $150,000.

Western Milling Co., reinforced concrete grain elevators, Tidal Canal, bet. Ford and Boehner Sts.; $300,000.

loore Shipbuilding Co., 3-story reinforced concrete shop bldg., foot of Adeline St., $105,000.

California Cotton Mills, 1-story brick factory bldg., 22nd Ave. and Cotton St.; $25,000.

Western Fuel Co., 1-story coal shed, Oak St., bet. 2nd and 3rd Sts.; $500.

August

Kaelin, 1-story concrete machine shop, 3rd and Clay Sts.; $13,000.

Graff, s-story hollow tile bakery, Grand and Santa Clara Aves.; $10,000.

Neutral Warehouse, 1-story warehouse, foot Market St.; $22,000.

off Magnesite Co., dust bin, foot of 22nd Ave.; $120.

alley Creamery Co., alterations, 477 21st St.; $15,000.

Pacific Gas and Elec. Co., concrete foundation, 1st and Jefferson; $13,000.

al General Accessories Corp., 1-story elec. foundry, Adeline and 33rd Sts.; $4,000.

Coast Tire and Rubber Co., 2-story reinforced con. office bldg., E. 12th and 50th Ave.; $40,000.

Coast Tire and Rubber Co., 1-story reinforced con. garage, 55th Ave. and 10th St.; $5,000.

Coast Tire and Rubber Co., 1-story reinforced con. lavatory, E. 10th and E. 12th, 48th and 50th Aves.; $6,000.

California Pack. Corp., 1-story brick and con. printing plant, 1st St. and Myrtle; $20,000.

Pacific Coast Shredded Wheat Co., tank tower, 50 Market; $1,160.

Howard Co., alter., 1st St. bet. Myrtle and Filbert Sts.; $800.

Howard Co., track scale and pit, 1st St. bet. Myrtle and Filbert, $7,940.

September

Lawrence Reynolds Co., 1-story factory, Western Waterfront; $2,000.

California Cotton Mills, 1-story factory, Livingston and Cotton; $4,000.

Standard Fence Co., 1-story warehouse, concrete, 50th and Lowell Sts.; $25,000.

Geo. H. Roos, 1-story reinforced con. store bldg., 21st and Broadway; $27,500.

October


Parr Terminal Co., 1-story restaurant, Goss and Embarcadero; $1,000.

Pacific Coast Canning Co., 1-story shed, 11th St. and Pine; $750.

Barrel Syrup Co., 1-story boiler house, 800 High St.; $200.

Bekins Storage Co., 1-story shed, 22nd and Brush; $3,000.

Novelty Products Co., 1-story factory, 61st St. and Lowell; $500.

P. G. & E. Co., 1-story add., Water and Jefferson; $27,000.

Oliver Mfg. Co., 1-story warehouse, 5th and Jackson Sts.; $7,000.


November

Parr Terminal Co., 1-story warehouse, Western Waterfront; $7,000.

California Cotton Mills, 1-story add., Kennedy and Railroad; $800.

December


The Shurtzer Illuminated License Plate Co., 1-story office bldg., 19th Ave. and S. P. R. R. Tracks; $9,000.

Standard Fence Co., 1-story shed, 61st and Lowell; $500.

Premier Machine Co., alter., 2201 E. 22nd St.; $125.

Pacific Gas and Elec. Co., con. foundation, 1st and Jefferson Sts.; $10,000.

A. W. Palfreyman Packing Co. (Jones Co.), frame tank tower, 29th Ave., opp. E. 11th St.; $10,000.

Pacific Coast Shredded Wheat Co., concrete grain bins, Poplar and 14th Sts.; $44,500.

Walnut Grove Creamery Co., 1-story add., 45th and Market Sts.; $1,500.


Bright & Miller, brick add., 220 2nd St.; $850.

Fageol Motors Co., 1-story shed, Hollywood Blvd. bet. 106th and 107th Aves.; $2,000.

EDITORIAL

Regular monthly publication of the "Building Review" is resumed with this issue. After the sudden and regrettable death of Mr. L. A. Larsen, it was necessary to reorganize the publishing staff. The editors believe that the present outlook justifies an optimistic program; that there exists in this field a fine opportunity for service to the profession, the building industry, and the public. It is not alone in the older parts of the country that the standard of building has risen; it will be the effort of the "Building Review" to reproduce good work throughout the West by illustration and article, as adequately as possible, with constructive criticism, and without prejudice.

During the recent visit of President Kendall and Director Kohn of the American Institute of Architects to this coast, keen interest was aroused by their description of the movement originating in New York, which has led to the formation of a National Congress of the Building and Construction Industry.

There has been a steadily growing recognition of the need for co-operation between the various parts of the Building Industry, to prevent friction and ensure the smooth running of that great machinery; to recognize the functional responsibility of every part of the industry for the whole. Over a year ago we called attention in these columns to the advocacy of a National Building Guild in England. That is practically what is now proposed in this country; an institution to discover the causes affecting a satisfactory supply of material, labor and craftsmen. To this end delegates will convene from seven elements of the industry; architects, engineers, general contractors, sub-contractors, material manufacturers, material dealers and labor, with the addition of representatives of speculation and investing builders and the Trade Press.

To quote from the printed announcement, the purpose in bringing together representatives of the various elements is "to do jointly certain vitally necessary things which can only be done by a united industry; for example:

"To make a scientific survey of the needs of the industry in workers and of how these needs can be met; to study the present methods of training and enlisting personnel; and to discover and correct the causes of the progressive decline in the supply and quality of workers in the industry.

"To study the needs of the industry and the sources of supply of raw materials and manufactured products; the quantities of such now available, and to determine the national requirements of the construction in 1921 and succeeding years. * * * * How is the industry to prepare itself to meet the demand for structural materials; a demand not potential but which will become real when the vast amount of projected work is released? In the future, how shall the industry escape the stifling effect of both under production and over production?

"How is an adequate supply of skilled craftsmen in the several trades to be provided and maintained?"

"How is genuinely co-operative effort by employers and wage earners (whether the wage earners are organized or unorganized) to be substituted for the antagonism which, in the past, has checked production?

"How shall abundant credit resources be made available, at reasonable cost, to the industry, in order that it may function in satisfying public need?"

"How shall the industry be led to adopt a uniform and equitable policy in bidding and with respect to contract terms and conditions?

"How shall the proper and economical functions of the respective elements of the industry be defined, and how shall performance be assured in order that maximum efficiency may be attained."

If this Congress can become a brain and eyes for the industry, for securing facts, for thinking and planning, using local committees similarly constituted as hands for whatever action may be advisable, it bids fair to solve the difficult problem of assembling the separate groups into a functioning, co-ordinating body. To call this a crisis is not an exaggeration. The building industry is practically paralyzed today. Its elements pull apart instead of together. An attempt to bring them into a working relationship, "on the level," as Director Kohn emphasized, will be welcomed and should be actively supported by every member of every element concerned. Success will be to the interest, both of the industry and of the general public.

Mr. Oswald Speir died on the train en route from New York to Chicago on February 2, 1921. Mr. Speir will be remembered as being connected for many years with the organization of Gladding, McBean & Co. in this city, and for the last three or four years their representative in Los Angeles. In June of 1920 Mr. Speir was selected to serve as the managing director of the National Terra Cotta Society, with offices in New York City, and it was while on his way to attend the annual meeting of this society in Chicago that he passed away.

(Continued from page 55)

It will of course be understood that this sketch is only a suggestion. It is in no sense official and will not bar any architect from submitting a design of his own when designs are called for. There is a general and growing feeling that the proposed conservatory should be in close proximity to the University, and it was for the purpose of co-operating in the movement to put it there that the sketch was made.

A certain color scheme would be followed—something that would catch the first rays of the California sun coming up over the Berkeley Hills and hold them like a memory after it had sunk in the Golden Gate. By using tinted mortar and tile roofs the colors would blend more and more harmoniously with time. The life of the structure would be practically unlimited.

Until the detail is worked out to comply with requirements as yet unknown, it is of course impossible to estimate with any accuracy the cost of such a project. It may be said, however, that with the minimum amount of steel work needed for the central building and the shallow foundations under the studios, together with the moderate cost of the property compared to that of an equally desirable site in the heart of our larger cities, the total cost of the conservatory would be very reasonable.
THE BUILDING REVIEW

ARCHITECTURAL DIRECTORY

For the benefit of readers and advertisers we will publish each month a portion of the revised list of Architects, Designers and civil Engineer's of the Western States.

(For information concerning copies of the complete list write "The Building Review.")

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Berkley
J. F. Bigger, Morgan Building.

Chambers
B. R. Maybeck, La Loma and Buena Vista Streets.

Kingsfield
R. G. Officer, Berkeley Bank Building.

Tolleson
J. W. Plache, 205 Shattuck Avenue.

Ratclifif
J. J. Ratcliff, Jr., First National Bank Building.

Mathewson

Italy
Hayes C. Allen, 2514 Hillegass Avenue.

Hind
W. C. Hind, 2019 Channing Way.

Shop

J. Pillar
the

Albert G. Wright.

Ringame
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El Dorado
R. E. Swearington.

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Hood
Francis W. Reid, East Street.

Tuna
Leo Kroonen, 524 West Seventh Street.

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Don W. Wells, Security Bank Building.

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dungburg
Anton Johnson, Kingsburg Bank Building.

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W. E. Ehlen, 1344 East Ocean Avenue.

S. W. Fink, 425 Cedar Avenue.

Nat Piper, 12 Locust Avenue.

G. H. Kahrs, 12 Locust Avenue.

(Continued next month)

UNIVERSITY OF CALIFORNIA EXTENSION DIVISION

Meeting a demand for special instruction in reinforced concrete construction, the Extension Division of the University of California started a class in that subject in San Francisco on Wednesday, February 2, at 7:15 p. m. The class meets at 1357 Sutter Street, Emanu-El School Building, and the instructor is A. J. Eddy, construction engineer with the Standard Oil Company, formerly professor of civil engineering at the University of California.

The study is intended for men with some experience in mechanics and structural engineering. It is planned particularly for draftsmen, architects, engineers and contractors, and the class sessions of two hours one evening a week for eight weeks will be devoted to lectures and discussions of the application of mechanics to concrete structures, including beams, columns, floors, etc.

Registrations may be made for the course now at the San Francisco office of University Extension, 140 Kearny Street, or at the offices in Room 301, California Hall, Berkeley.

Among the topics to be discussed are: bending moment and shear; resisting moment; fiber stresses, columns, comparison of wood and steel with reinforced concrete beams; properties of concrete, general theory of reinforced concrete beams; derivation of formulas; T- beams; concrete columns; reference works.

CATALOGUES WANTED—Architect Frank H. Paradise, Pocatello, Idaho, requests catalogues and samples of material houses, particularly those from firms and representatives from the West Coast and Intermountain States.

ARCHITECTURAL DESIGNER

The United States Civil Service Commission announces an open competitive examination for architectural designer. Two positions in the Philippine service, each at $4,000 a year, and vacancies in positions requiring similar qualifications, at this or higher or lower salaries, will be filled from this examination, unless it is found to the interest of the service to fill any vacancy by reinstatement, transfer or promotion. Employees in these positions will be allowed necessary expenses when absent from headquarters in the discharge of official duties. Applications will be rated as received until June 1, 1921. Applications for information concerning examinations for the Philippine service should be addressed to the Civil Service Commission, Washington, D. C.

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Special Meeting, February 10, 1921
A special meeting of the San Francisco Chapter of the American Institute of Architects was held in the rooms of the San Francisco Architectural Club on Tuesday evening, February 10, 1921, at 8 p.m. to meet President J. H. Kendall and Director Robert D. Kohn. The meeting was called to order by the President, Mr. George A. Applegarth. The following members and guests were present:

Guests: J. H. Kendall, Robert D. Kohn, Mr. Mokra, Mr. Donaldson of Vancouver.


General Business
President Applegarth addressed the meeting and referred to the resolution just passed by the Chapter on Competitions and Fees.

The chair then introduced President J. H. Kendall of the American Institute of Architects, who spoke on the Institute's view of Competitions and Fees.

The chair then introduced Director Robert D. Kohn, who spoke on the National Congress of the Building and Construction Industry now being organized throughout the country.

The following resolution was duly seconded and carried:
Resolved, That it be the sense of this Chapter in meeting assembled, that in the Circular of Advice and Information on Architectural Competition, Document Series A-No. 114, where any reference is made to the status as to qualification of any architect entering the "open" stage of a competition the same be and is hereby repealed and stricken from said document.

The claim being made, that first where an owner desires to take advantage of the "open" form, said owner must assume all obligations as to qualifications of those entering the competition, and also on the presumption that any architect who is able to win "first prize" in an "open" competition should be given credit of being able to carry the same to completion and is therefore entitled to the award and the entering into the agreement for services, to be rendered under Article 11, Page 14, and on Page 16, Typical Form, all as enumerated in said Circular of Advice, known as A. I. A. Document Series A No. 114.

Adjournment
There being no further business before the Chapter, the meeting adjourned at 10 p.m.

Approved February 17, 1921.

J. S. FAIRWEATHER, Secretary.

Regular Meeting, February 17, 1921
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 on Thursday evening, February 17, 1921, at 8 p.m. The meeting was called to order by President George A. Applegarth. The following members were present:


Minutes
The minutes of the meeting held on January 20, 1921, and special meeting of February 10, 1921, were read and approved.

Unfinished Business
No unfinished business was taken up.

General Business
Letter from E. C. Kemper, regarding $25,000 Educational Fund, referred to Mr. Ernest A. Coxhead.
Letter from Boston Chapter on education project referred to Committee on Education.

Letter from Committee on Small Houses ordered filed. A member interested can read in Institute Secretary's office.

Adjournment
There being no further business before the Chapter, the meeting adjourned at 10 p.m.

Subject to approval.

J. S. FAIRWEATHER, Secretary.

WASHINGTON STATE CHAPTER, AMERICAN INSTITUTE OF ARCHITECTS

26th Annual Meeting, 265th Meeting
Minutes of the 265th meeting, held Thursday, January 6, 1921, at 6 p.m., at the Pig's Whistle.


Guest: John Donovan, Oakland, Cal.

Minutes of previous meeting read and approved.

Mr. James Stephen of the firm of Stephen & Brust who recently resigned from the Institute, was unanimously elected an honorary associate of the Chapter.

Moved by Mr. Willcox and seconded by Mr. Huntington, the report of the Committee on Professional Practice relative to minimum fees on state work be reconsidered. Carried.

Moved by Mr. Field, seconded by Mr. Loveless, that the above mentioned committee report be accepted. Carried.

Moved by Mr. Willcox, seconded by Mr. Merriam, that a committee report above-mentioned be approved and adopted by the Chapter and referred to the Legislative Committee to present to the proper persons in the State Legislature and seek their adoption as a law.

Mr. Loveless, for the Committee on the Annual Meeting, to present a list of prospective members who would be invited to attend the annual meeting. President Alden read a list of tentative guests at the annual meeting. General discussion as to the program followed.

President Alden announced that the Chapter had been invited to join the National Council of Architectural Registration Board as a chapter, and that Mr. Baeder spoke in favor of joining. Carried.

Moved by Mr. Naramore, seconded by Mr. Baeder, that the Chapter make application for membership. Carried.

At this point Mr. John Donovan of Oakland was introduced by the President and for about twenty minutes Mr. Donovan gave an interesting account of his experiences in the practice of architecture in Oakland, both privately and for the city government. He complimented the Chapter in regard to the fine spirit shown in honoring Mr. Stephen and upon its true spirit of co-operation, its support of Mr. Naramore in his recent difficulty with a member of the School Board. Mr. Donovan also told a funny incident in connection with the construction of the Oakland Auditorium which he attempted to design a truss which would carry elephants.

Mr. Alden reviewed his trip East to St. Louis, where he had attended a meeting of the Board of Directors of the Institute. He spoke of his visit en route, at Walla Walla and in Spokane, where he had luncheon with the Chapter of Architects, at which time they discussed the small house problem. He reviewed the activities of the members of the Board of Architect Examiners in St. Louis, having been delegated as the representative of the Washington State Board. Speaking of the board meeting, he related on the splendid organization of the work in the hands of Mr. Kemper and compliments him highly on his efficiency as Executive Secretary of the Institute. He also spoke highly of the work of the Structural Series Committee.

It was recommended by the Committee on Institute Affairs that the Chapter take no action on the matter of penalties, pending action from the corresponding Institute Committee.

Moved by Mr. Field, seconded by Mr. Gould, that the annual meeting be adjourned to February 5th. Carried.

H. O. SEXSMITH, Acting Secretary.
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Business Manager—E. D. MCDONALD.

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"THE WHITE COLUMNS OF A SMALL HOUSE ON THE HILL—
LIKE A SHRINE DEDICATED TO THE SPIRIT OF THE VALLEY."

WE ARE LEARNING
(By Harris Allen)

One of the oldest proverbs known to man, in one form or another, and one of the least heeded, runs to the effect that "a fool learns from his own experience; a wise man learns from the experience of others." If wise men were not rare, we should not call them wise. Certainly it is true that in all things, big or little, it is the exception rather than the rule to find an undertaking deliberately and intelligently based on the lessons of other people's experiences.

For the past year the realization has been gradually forced upon us that as a nation at war we proved the rule of a most lamentable degree. It is almost inconceivable that after watching for three years the progress and problems of the world's most terrible war, we should have failed to ascertain and profit by the experience of our allies. The cost of that failure, in life and labor and gold, has been well nigh incalculable.

But to some extent the strain of excitement and pressure may excuse, or at least explain, the hysteria which caused our war-time mistakes and floundering (passing over our neglect in the way of preparedness). War, however natural to human nature, produces abnormal conditions.

No such alibi applies to normal, peace-time operations. The rate of progress then is determined, broadly, by the degree of general education which increases the number of wise men and decreases that of fools.

Along some lines the increase has been marked in this
country. In others, notably those which do not concern directly the operation of practical or commercial industries, those which have to do more with the aesthetic and personal side of life, progress has been desultory and sporadic. However, within the last few years there have been many increasing signs, many evidences of a general increase of discrimination, of a tendency to observe and profit by experience and experiments along these lines.

The general improvement in architecture throughout the country is unmistakable evidence to this effect. And along with the efforts, of varying success, to improve cities by definite city planning, have developed numerous special "residence tracts." Areas of land have been laid out so as to engage the natural beauties of trees and views, hills and dales, with intent to produce districts of pleasant houses set in pleasing environments.

So far, so good. But too often the individual home-builders have decided along the same old method of learning by their own experiences, with the result that what might have been a vista of harmonious homes becomes a hodge-podge of clashing styles and colors, or, less frequently, a monotonous repetition of commonplace types.

What an encouragement, then, to come upon a place where, so far, the mistakes have been avoided which have injured so many of our efforts in this direction! There are such places: one finds them accidentally here and there, with a sense of pleasant surprise that the common individual selfishness—and foolishness—has not crept in, to blot the picture.

Driving down a broad avenue which led from Oakland's park-bordered lake on a sunny spring morning, my attention was caught by an exceptionally well designed iron fence, about three blocks long and set well back from the street. Wide, curved pavements led between smoothly shaved lawns to two gateways, guarded by richly-wrought iron posts. Lanterns, swinging from the gate-posts by bold brackets, were silhouetted against a gently curving and rising road, which ran between houses very different from the crude and clumsy blocks lining the really fine avenue outside.

This looked almost too good to be true, and clearly called for investigation. Stopping long enough to get a photograph of the land office, of warm yellow stucco with pale green lattices and a delightful roof laid with tile of many soft terra-cotta shades, a vista opened ahead which was full of inviting possibilities. At various intervals were stucco coated houses of many soft colors, varying warm...
ones of gray, pinks and buffs, cream, yellow; no two houses alike, but none clashing with any other. Most of the houses possessed distinct architectural character; the occasional neutral specimens did not offer jarring notes, but served rather as foils for their fellows. The buildings as a whole showed to be the work of many different architects, and, just as plainly, the presence of general consideration for general harmony.

For a space the road ran along a crest, giving a superb view of the roofs and towers of the city near by, and the bay beyond. Dividing suddenly, Presto! we were in the woods, with the curving, dipping road dappled with light and shade. The warm sunshine played in and out among trees and houses—in fact, one had the sense of skillful stage management" in the way each house received its "ill need of sun, although the surrounding woods seemed abundant and natural. Such deforestation as was necessary to make room for buildings and roads must have been carried out after careful study indeed; such results are not achieved by chance—nor can experimental mistakes be easily remedied or concealed.

Winding, descending, climbing, dividing, these roads carried us through the woods. A succession of charming pictures were impressed on the memory. It was interesting to note that some of the groups of houses, harmonious together, might have contrasted too strikingly with the next group—but trees, and the turn of the road, and the grades of the hill, almost or quite hid them from each other.

Coming out again on a height, we looked back down a long lovely valley bordered with stately trees, to the other end gateway which marked the limits of the conventional, hum-drum city. Several times this valley has been offered as a park, at rates much lower than surrounding property; but the suspicious public refused to vote for its purchase.

It is a beautiful breathing-space as it is; while we lingered there, several groups of children romped by with the familiarity of habit. It ought to be a park; but it ought not to be made too civilized, too smooth and regular. Far better if it were wisely built up with home like the adjoining property.

Later on, looking up from the gateway, the afternoon sun caught the white columns and walls of a small house on the hill at the end, and it seemed like a tiny temple, a shrine dedicated to the Spirit of the Valley.

Life ought to be very pleasant in such a setting. And it is difficult, now, to see how the development of this
"tract" could have been improved. Of course it is still possible for some individuals, over-ambitious to work out their own salvation, to express their "individuality" by "different" types of houses, to spoil or at least injure the harmony and charm that now exists; but that is so evident, it speaks for itself so surely, if so quietly, that it would seem difficult for anyone not to read and heed the lesson.

From an architectural standpoint, the restraint which characterizes all these dwellings is most noteworthy. While there is plenty of originality, of color, of study of mass and detail, there is nothing bizarre, ornate, restless. There is a sense of refinement and repose. These are homes to be lived in. Almost all are rather small and inexpensive; but they are not cramped or confined. They are not set too close together; and the general harmony of treatment of the various groups gives a feeling of spaciousness which is frequently lost with many much larger and more costly dwellings.

Quite a number of garages have been incorporated into...
The houses are not all equally interesting. Among them stand out certain ones that possess that indefinable distinction that architects call "style" or "character." Such are the Clarke and Lauffer houses, which have the Italian charm of straightforwardness and simplicity. It is interesting to know, in connection with the latter of these, that a plan designed for a purely English exterior (shown in model form in Plate 46) has been reclothed in its present form, with but slight change, to suit the clients of the architect, Mr. McCall. Several other quietly charming homes are those of Mr. Simpson, which "compose" into very harmonious groups. Two little villas by Bakewell and Brown are gay with brilliant tile and white stucco, but
unfortunately are sunk below the road, and so close as to give the effect of being in an area. The picturesque mass of Mr. Farr's cottage, a bit restless yet, will mellow pleasantly with time and vines. There is a fascinating little house which Reed and Corlett designed, which was smuggled in among pine trees and looks as though it had just grown.

And many others—in fact, almost all—have positive or negative virtues which result in a high average standard, architecturally, and the softening effect of gardens and weather will tend to make the whole settlement increase steadily in attractiveness. For after all it is new; the delightful villages in France and England and Italy, over which tourists rave, have been centuries in the making and the mellowing. But it is clear to be seen, and safe to say, that there were wise men involved in the planning and developing of this settlement, who avoided many of the mistakes of the past; and it is pleasant and encouraging to find such subject for description.
THE MOST COSMOPOLITAN OF GARDENS—
THE GARDENS OF CALIFORNIA
By ESTHER MATSON

How many of us realize that the gardens of California are the most cosmopolitan gardens in all the world? Indeed, we do know that the whole of the Golden State, from north to south, offers amazing opportunities to the gardener, but we are hardly yet aware what a diversity of portunities it offers. As a matter of fact, we have here, Professor Wickson puts it, "an embodiment of the horticultural possibilities of all the zones except the strictly tropical." More than this, it has been found that many plants from far distant corners of the globe will actually grow better than they did in their original habitat. Small wonder then that many an Eastern visitor to the Pacific Coast is startled by the variety which confronts him and inclined to ask himself if his senses are not playing tricks.

It is not only in the suburbs of the cities, but also right thin the towns themselves that the gardens are to be discovered. Sometimes these gardens are large and stately; sometimes they are miniature and intimate; sometimes they are enclosed behind walls or hedges; sometimes they are open to the gaze of every passer-by. Besides this, in many instances the streets have been so planted with pepper or palm or camphor trees that they give the town itself a garden-like aspect while occasionally the parkings, or spaces between sidewalk and street, have been turned into tiny plots gay with calendulas or with vari-colored verbena—or perhaps with sweet alyssum intermingled with the Eschscholtzia or California poppies.

How true it is that the wealth of native plants has not yet been sufficiently appreciated nor made use of. (For example, these never-to-be-forgotten golden poppies, and the white Matilijas—and again the wonderful Yuccas which the padres quaintly called the "Lord’s candlesticks.") But when the soil and climate agree as they do with so many non-native growths, who can be blamed for being tempted to cherish them, too!

The best excuse for yielding to the temptation is the fact that the trees, the shrubs and the flowers from other lands come to us full of associations. They come freighted with news of "Far away and Long Ago." They bring the glow of romance into the garden and render it not merely beautiful, but humanly suggestive.
What a filip is added—for an instance—to our enjoyment of the roses and the palms to remember that the first ones were brought over to this new land from the old land of Spain by the fervent padres. How much more interesting are the eucalyptus trees, the figs and the acacias when we remember that they grow in the Holy Land. As for the cypresses—certain slim, spiring ones are reminiscent of Italy. Others gnarled and wind-tossed, though native to California, suggest the far-famed Cedars of Lebanon. The olives remind us alike of Palestine and of Italy. Then there are papyrus plants, hintful of Egypt. There are irises and chrysanthemums, and peach, cherry and plum blossoms, elo-
quent of Japan. And there are the great Deodars, stately and mystical, that grow nowhere else save here and in “farthest Ind.”

There is the Cherokee rose coming to us from China by way of our Atlantic Southland. There is the glossy leaved Coprosma hailing from New Zealand. There are bamboos from Japan. There is the Escallonia from Chile and Patagonia, and the Petunia, brought originally from Brazil. And there are the Lilacs—great travelers they having been brought to England from Persia, and from England to New England—so the story has it—introduce to adorn the garden of Agnès Surriage.

The strangest thing about it all—at least so the new comer is prone to think—is the way the plants he is most familiar with at home are to be seen here growing close by jowl (and out-of-doors the year round) with plants from the semi-tropics. He has to pinch himself to see if he is not dreaming as he walks along an avenue bordered with palms and pepper trees and spies through the palm of a white-painted fence an old-fashioned New England garden filled perhaps with pansies, pinks, sweet-william and hollyhocks. Next instant he may come upon a corner that appears to be a veritable tangle of rare varieties of Cacti. Still another moment and he may be peering through the wrought-iron grille in the stuccoed wall of some materialized Castle in Spain. And here he may barely glimpse the secluded patio-garden, boasting its orange and its fig trees, its aloes and oleanders and roses set about a gleaming pool.

One happy fact the visitor discovers soon and that fact that the note of cosmopolitanism is not confining to the great estates. No, it is a note that creeps into the least and most unpretentious of the garden-plots and creeps in oftener than not quite unawares. For many time the garden-owner has no idea what distant countries and what different climes his trees and flowers have come from. He does not stop to think, for example—that in the morning glories call China their native haunt—that the peony came originally from Japan, where it is called pleasantly “the Flower of Prosperity”—and that the Jerusalem Cherry, which, by the bye, thrives in California lil

"ANOTHER SITE MAY BE CONJURED EASILY INTO THE LIKENESS OF AN ANCIENT PERSIAN PLEASAUNCE"
Another site adapts itself to the raint ingenuities of the Japanese style, and still another may be easily conjured into the likeness of an ancient Persian pleasance.

Truly it is a hospitable country that lends itself thus to the most varied moods of man as well as to the most various trees and flowers! "Oh, never the east and west shall meet" sings Kipling. Nevertheless, it is a fact that the plants at least of the east and west have met and fraternized. Nor can we help being thrilled as we remember that many of them were brought here by the gallant Spaniards of a bygone era, while many others came as treasured seed package in the great "prairie schooners" of the sturdy American pioneers.

"How much more interesting are eucalyptus trees when we remember that they grow also in the Holy Land...."

**Bits of Daniel Burnham's Philosophy**

"A vacillating compass on an uncharted sea is about as safe a guide as that of making a memorandum book of your brain!" said Mr. Burnham.

- "Make all things a matter of record. Make your entries daily. Never trust to memory!"

Then he chuckled and looked wise like an owl.

* * * * *

"Where are your other studies?" queried Mr. Burnham, when his assistant submitted a final design for consideration.

"They are all bad." was the reply.

"Well," he said, "show me the bad plans; they are the ones that do the talking; they are the ones that reveal the good ones."—Willis Polk.

REMIND US OF PALESTINE'S FAMED CEDARS OF LEBANON...."
THE BUILDING REVIEW

PLANS OF RESIDENCE SHOWN ON PLATE 45

LAKESHORE HIGHLANDS, OAKLAND, CALIF.
RESIDENCE ON SUNNYHILLS ROAD

LAKESHORE HIGHLANDS, OAKLAND, CALIFORNIA

REED & CORLETT, ARCHITECTS
MODEL OF FIRST DESIGN FOR MR. JOHN LAUFFER'S RESIDENCE

RESIDENCE OF MR. JOHN LAUFFER
LAKESHORE HIGHLANDS, OAKLAND, CALIFORNIA

CHAS. W. McCALL, ARCHITECT
DINING ROOM IN MR. JOHN LAUFFER'S RESIDENCE

LIVING ROOM MANTEL, MR. JOHN LAUFFER'S RESIDENCE
LAKESHORE HIGHLANDS, OAKLAND, CALIFORNIA

CHAS. W. McCALL, ARCHITECT
RESIDENCE OF DR. AUSTIN F. CLARKE
LAKESHORE HIGHLANDS, OAKLAND, CALIFORNIA
CHAS. W. McCALL, ARCHITECT
Hall in Dr. Austin F. Clarke's Residence
Lakeshore Highlands, Oakland, California

Chas. W. McCall, Architect
POSTER FOR SOLDIERS’ MEMORIAL BUILDING,
BERKELEY, CALIFORNIA

HAIG PATIGIAN, SCULPTOR
HARRIS ALLEN, ARCHITECT
THE TRENDS OF MODERN FURNISHINGS

By CHARLES E. ANDERSON *

For many years the collector, the decorator, and the architect have searched throughout the British Isles and the continent for English architecture, furniture, and textiles. Dutch and Empire influence also affected the interest of many Americans on account of their inherited heirlooms. There is now a general trend to forsake the severe austerity of this period for the more glorious and rich designs of France, Spain and Italy, conforming our taste and selections to the pieces which best mould themselves into the uses of our surroundings and daily life.

Western architects realize the climatic possibilities of California with its rugged mountain landscapes, seashore vistas and the profusion of almost tropical vegetation which lends itself so appropriately to Spanish and Italian architecture.

This particularly refers to the charming effect of plain plaster surfaces, accentuated by richly modelled overdoors, iron grills of intricate design and roofs of multi-colored tiles.

Conforming to these exterior effects would be found interiors of rough plaster, hung with rich tapestries and damasks, heavy carved cornices highly decorated in color and marble or tile floors.

The accompanying photographs aid toward the visualization of these effects. Colorful hangings are contrasted to beautiful patined furniture; dignified simplicity in architectural treatment is enriched by exquisite carvings.

*Of the City of Paris Decorative Studio.

In the photograph of a bedroom which is essentially masculine, this scheme has been carried out with walls of rough sand plaster, a highly decorated cornice, black marble door casings and baseboard. The carved bed of the early sixteenth century, correct in every detail, an exact replica of the original in the collection in the Davanzati Palace, with hangings of Portuguese Damask, forms a splendid setting, together with a Gothic stall from Belgium and an Italian chest; a gold mirror completes this room.

The photograph of the hall shows the use of marble flooring and the combination of marble and wood furniture which is softened with the mellow tones of needle-point coverings. The rich wall hangings show an ecclesiastical influence.

Another photograph shows a sixteenth century table from the Salvadori Palace in Florence, Spanish metal Torcheres, a wrought-iron mirror against the glorious red of Portuguese Damask Wall Covering giving the effect of luxury and balance.

The ornamental accessories of these rooms are unlimited both in design and color. The photograph shows a black ground Spanish leather screen, hand tooled and illuminated, which adds a delightful touch of rich color to the room, as do the gold lamp and vestments. Pillows of antique tapestries in many of the soft old colorings lend a touch of elegance.

Where formal functions are held and where there is a
THE DELICATELY MOULDED SURFACES AND GILDED TINTS OF THE FRENCH XVTH AND XVIth CENTURIES
(Courtesy of the City of Paris)

A VIRILE RENAISSANCE FOYER RELIEVED BY RICH DAMASK COVERINGS AND HANGINGS
(Courtesy of the City of Paris)
OLD WORLD ECCLESIASTICAL FABRICS AGAINST A SPANISH LEATHER SCREEN.
(Courtesy of The City of Paris)

ELIZABETHN OAK FURNITURE COVERED IN GENOESE VELVET FROM ITALIAN HAND LOOMS
(Courtesy of The City of Paris)
desire for lightness of color and design, the delicacy of the French Antiques comes as a pleasing variance. A selection of these pieces gives wide range for architectural color schemes which blend with their Aubusson covers. The photograph shows a very attractive French room of this type, which includes a French cut mirror with a marble top console, an antique inlaid commode, and a collection of French chairs and benches against a green painted glazed wall. A soft note of color is introduced by the use of French terra cotta statuettes and porcelain lamps.

**THE HERITAGE OF HOME OWNING**

(From "The Builders' Journal")

The shortage of homes in America as yet shows no signs of decrease. Like a great cloud its effect has spread over the country. High rents, overcrowding and unhealthy speculation are its attendant evils. This cloud has, however, a silver lining. As nothing else could do, the housing shortage has served to direct the attention of the American people to the value of home owning.

In the days of the old colonies, home owning was established as a precedent. The defense of the home developed the spirit of 76. Home owning is truly a heritage of the American people. During the past 50 years there has been a decided drift away from this policy.

The housing shortage has again forced public attention to this issue. As never before the average man is interested in the possibility of owning a home.

It is evident, therefore, that a great responsibility is about to be placed on the builders of America. To meet the demands of elevated standards of living; to conduct their affairs along businesslike lines; to give real service to those who are about to invest their money in homes—these are the demands which, if met, mean profits.

The Own Your Home Exposition in New York, Chicago and St. Louis demonstrate that those who are considering the purchase or building of homes have available unprecedented sources of knowledge on the subject. Manufacturers as never before are co-operating with prospective home owners to give them real information regarding the building and equipment of a home. Plans developed by good architects are available through many channels at low cost. Financial institutions generally are ready to cooperate with those who have developed the home owning spirit. On every hand will be found offers of co-operation, credit, special service and other means through which the prospective home owner may familiarize himself with the merits of materials, the artistic qualities of decorative units and the comfort and convenience values of modern utility installations.

The home owning instinct here meets the art of home making and the result should be the stimulation of interest in this question to a point never equaled since the early colonists were forced to a similar interest.
THE PACIFIC MANUFACTURING COMPANY

One of the prominent factors in the upbuilding of the Bay district has been the millwork turned out by the Pacific Manufacturing Company. Established in 1875 in Santa Clara, the consistent quality of work, especially as to fine interior lines, has made this plant one of the leaders in its line. During the war the company received high praise from the United States Government for special work in connection with airplane body construction.

RUST—THE FLAMELESS FIRE

"America's annual fire loss is $350,000,000." Just a few short months ago you saw this statement in bold black type, in circulars and posters scattered throughout the land. It was part of a startling array of facts issued in connection with the national campaign for Fire Prevention Day.

America's fire loss, in a broad sense, really amounts to more than $350,000,000; for underwriters do not compute the staggering losses resulting from rust, "the flameless fire." The oxidizing or rusting of metals is, chemically speaking, exactly the same action that goes on when a building burns. Rust is slow combustion, slow fire. It burns, consumes, destroys and leaves ruin in its wake. And it is all the more insidious and deadly because there is no fire alarm, no racing engines, no clouds of dense smoke or bier flames to furnish the exciting thrill.

Mr. John Young, Chief of the Portland (Ore.) Fire Department, has ordered that all rusty fire escapes in the city be repainted at once; that unless this is done many owners will be required to replace their fire escapes when inspection time rolls around. This is just another of the many facts the Fire Department that rust weakens and renders unsafe, metal structures, that deterioration results from failure to keep them painted.

What starts rust? Unprotected exposure to the elements. Oxygen in the air combines chemically with metallic elements and the reaction is an oxide, or rust. But atmospheric oxygen does not necessarily produce rust unless the air is humid. For example, a piece of dry iron can be left exposed on a sand dune of the Sahara desert where the air is dry and rust will not appear for days. The same piece of iron dipped in water and exposed to the air in a damp climate will show evidences of rust after an exposure of a few hours.

The causes of rust are many, but the chief cause is moisture, unaccompanied by unprotected exposure to the air. Salt water, an acid, a solution, promotes rust, while even perspiration from the human body, usually mildly acid, works the same way. Those who have studied the causes of rust realize that the only way ordinary metals can be kept free from rust is to coat them with some preparation of the atmosphere, and that will prevent rust from starting; in short, some rust-inhibitive paint that will be as non-porous as possible and penetrative enough to fill and keep filled all surface pores of the metal.

The specifications of a paint that will serve for this purpose cannot be laid down for all metal surfaces except in the most general terms. In general, the paint must provide a protective film elastic enough to contract and expand as the metal contracts and expands, thereby reducing the stress in the metal and in the degree with which they contract and expand when subjected to different temperatures. For this reason, a rust-inhibitive paint that may be well adapted for one metal may be altogether unfit for use on another.

Such a paint must not only be elastic, abrasion resistant and impervious to water, but must prevent the formation of rust beneath the coating and also prevent progressive oxidation where it has already begun.

The selection of a paint for a particular purpose is highly technical. There are many paints on the market that will answer a given purpose fairly well, but there is always a best selection which may vary very slightly from another compound that will not wear half as well. Under the circumstances, it is always advisable when about to paint to consult the Service Department of some reliable paint company, getting the advice of their experts before starting work or buying the paints.

This service, as a rule, is rendered without charge, and there is every reason why one not technically familiar with paint properties should avail himself of the service.

Statement of the Ownership, Management, Circulation, etc., Required by the Act of Congress of August 24, 1912.

Of The Building Review, published monthly at San Francisco, California, for April, 1921, State of California, County of San Francisco.

Before me, C. B. Sessions, Notary Public, in and for the State and County aforesaid, personally appeared, E. D. McDonald, 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 of the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 445, 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, Building Review Company, 410 Hobart Bldg., San Francisco.
   Editor, Harris Allen and Henry H. Guterson.
   Managing Editor, none.
   Business Manager, E. D. McDonald, 410 Hobart Bldg., San Francisco.

2. That the owners are: (Gives 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.) By C. B. SESSIONS.
   Harris Allen, Central Bank Bldg., Oakland.
   H. B. Braden, 59 Main St., San Francisco.
   H. C. Collier, 248 Mission St., San Francisco.
   E. D. McDonald, 410 Hobart Bldg., San Francisco.
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   A. Hoffman, 245 Mission St., San Francisco.
   Henry H. Guterson, 278 Post St., San Francisco.
   3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of the total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

Sworn to and subscribed before me this 3rd day of April, 1921.

C. B. SESSIONS.
Notary Public in and for the City and County of San Francisco, State of California.
(My commission expires May 26, 1924.)
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A CONSTRUCTIVE MOVEMENT

Mr. D. Knickerbacker Boyd, former Secretary of the American Institute of Architects, recently conferred with the council of the Masonic Building Trades for Philadelphia and vicinity, composed of all branches of the industry except carpenters and requested opportunity to address body on the subject of bettering conditions in the building industry which was granted.

It is understood that closer co-operation between the various elements in the industry, that the mechanics might know better the aims of the architect, and that the architect might help to create in the mechanic a keener interest in his work and in the results sought for in his architect’s designs, to the end that they might all help to develop themselves as instruments of service for the good of the industry.

He suggested that the Council provide opportunities for lectures on the crafts, plan reading, etc., and assured them of the cooperation of architects in such an undertaking.

The Bricklayers promptly responded to the suggestion and under Mr. Boyd’s active leadership a meeting was held at which a number of architects volunteered the men, and offered their assistance, and, as a first definite step in the program, the Plan Reading Class was started. This was conducted by Mr. Victor D. Abel, Architect, every Thursday night, starting with an attendance of about 20 men which gradually increased to the capacity of the hall.

Instruction was given in the reading of plans, the meanings of indications of materials on drawings, dimension lines, the placing of windows, partitions, the working out of stairways and the relation between the drawings and the specifications.

In addition to this class, Mr. Boyd arranged for speakers at nearly as possible every regular weekly meeting of the Union, with subjects of interest to the journeymen who were present to the extent of three or four hundred at each meeting, these talks being given by members frequently by interesting open discussion.

The following indication of the type of man and subject employed will perhaps be of assistance.

The President of the local Master Builders’ Exchange spoke of phases of building construction from the standpoint of the employer.

The Superintendent of Buildings of the Board of Education spoke as one familiar with the direction of building operations and related the industry to the educational system of the city.

An instructor in Architecture gave a lantern slide talk on the best examples of brickwork in Europe and the United States and in the men an enthusiasm and an increased appreciation of their craft.

The Director of Drawing in the Public Schools showed how important a part lessons in drawing and educating the eye and hand of children played in their later development as workers.

Various technically trained men spoke on the needs of sound types of construction, the strength of brick walls and piers, and the effect of mortars in brickwork, the process of manufacturing brick, the characteristics and use of lime and cement, and similar subjects of great interest to the mechanics.

The results were as anticipated: the men gained through their contact with the architects a clearer knowledge of the architect’s aims and a keener interest in their own work, and through contact with practically trained men connected with the industry, the men became more familiar with the materials with which they worked and the tools and traditions of their craft. In so far as this was accomplished the men became better mechanics and artisans. Also the architects, through contact with the mechanics, gained a clearer knowledge of their point of view, that is bound to be of value in their professional work.

The men appreciated the difficulty of getting apprentices to enter the craft under present conditions in the face of the steadier and more protected employment in clerical or commercial pursuits, and they believed this condition could be improved greatly by stimulating a keener interest and joy in the work by means of cooperative measures, such as have been outlined above.

As a result of this first season’s work, an enlarged program is being prepared by the bricklayers for the coming season which is to include better apprentices. Other trades are making similar plans, and all have apparently been imbued with a spirit of enthusiasm through the interest of the architects in their work.

As a further result, Mr. Boyd has been designated as the spokesmen for all organized labor in the building industry for Philadelphia and vicinity, including also the carpenters, who have since participated in the movement. As chairman of a Committee on Education and Information, Mr. Boyd is hoping to arrange for better opportunities of co-operation between employers and employees, in addition to a preliminary meeting held with the Committee on Industrial Relations of the Chamber of Commerce of Philadelphia.

As a result of this meeting, a program was requested from labor, which has been submitted to the Chamber of Commerce and to organizations of employers in the building trades.

The value of such cooperation is self-evident, and its general application to the building industry throughout the country would have results of incalculable benefit.

The Building Review

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Clay at 15th Oakland
Every progressive American city has its necklace of more or less attractive residence tracts, on the order of the very attractive area described in this issue. By no means their least valuable result to the community is the incentive they offer to the average American citizen.

The urban palaces and the great suburban estates of our very rich men are sources not only of admiration, but of bitterness. Such piles of stone and acres of velvet lawn have been the cause of bloody wars and revolutions—a trite truism. These pleasant, modest homes, on the other hand, are within the reach of any man who has energy and ability. Their frank limitation of space stands for independence; the generally harmonious landscape gardening treatment suggests an atmosphere of neighborliness. Fences are rare in these districts (at least in our Western cities), except to screen discreetly the intimacies of the laundry and service yard. Children play safely, away from the rush of city traffic. In such places, surely, should the true spirit of Americanism develop naturally; the healthy ideals of the land of equal opportunity.

There is a marked tendency in modern thought and comment toward appreciation of the great value of growing ownership of homes as a bulwark of national security and unity. The recent editorials which are here quoted state certain definite aspects of this view in a clear and forcible manner. We cannot emphasize too strongly their truth and importance, and the desirability of widespread consideration of such statements at this particular time.

NEW HOMES HELP DESTROY RADICALISM

(From "Hardware World")

Those who have studied the matter closely tell us that a million homes are needed now in the United States simply to meet the demand, not to provide a surplus.

The home is the greatest stabilizer known. It stands as a bulwark against radicalism, no matter in what guise it may appear. The man who owns a home or the land on which to build a home, or even who has through his industry and thrift acquired an equity in a home, will not be an advocate of communism—unless he is mentally unbalanced. And the fact that he has a home or is striving to get one argues against an abnormal mentality.

If the people of the United States should do their full duty this year and build the urgently needed new homes, the end of the year would see one million new votes against communism, or any other "ism" running counter to the approved rules and regulations of our free institutions.

Just as a land-owning peasantry in Russia will eventually banish communism from that country, so a land-owning and home-owning citizenry in the United States will keep communism from getting a foothold in this country.

Thus we have a double incentive toward home-building: We need the houses to live in, and we need them as permanent. Substantial votes against radicalism of all sorts. In its insane efforts to "conquer the world" Bolshevism will find its Waterloo wherever it encounters a home-building, home-owning people.
ARCHITECTURAL DIRECTORY

For the benefit of readers and advertisers we will publish each month a portion of the revised list of Architects, Designers and Architectural Engineers of the Western States.

(For information concerning copies of the complete list write "The Building Review")

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dera
E. F. Roberts.
ryville
desto
G. S. Freitas.
H. Hoosie, Ramont Building.
J. H. Hubert, 919 1 Street.
M. Miller, 128 West White Oak Street.
reed
W. E. Bedesen, Elks Building.
provia
E. J. Brein, 208 Myrtle Street.
A. H. Memmler, 320 East Palm Street.
C. L. Wilson, 608 West White Oak Street.

(Territory continued next month)

TERRITORY OF HAWAII

Honolulu, T. H.
Clark & Wood, Fort and Merchant Streets.
Emory & Webb, 308 James Campbell Building.
Flores & Miller, 304 James Campbell Building.
H. L. Kerr, 314 McCandless Building.
E. A. P. Newcomb, 24 Halelana Park.
Arthur Reynolds, 3 Elite Building.
Ripley & Davis, Boston Building.
C. W. Winsted, 310 Bank of Hawaii Building.
Emory & Webb.
Herbert Cohen.
Flores & Miller.
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OFFICIAL NEWS OF PACIFIC COAST CHAPTERS, A. I. A.

SAN FRANCISCO CHAPTER

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 on Thursday evening, March 17, 1921, at 8 p.m. The meeting was called to order by Vice-President Hubert A. Coxhead. The following members were present: Messrs. E. A. Coxhead, Edward G. Bolles, J. W. Dolliver, Horace G. Simpson, Wm. Mooser, W. B. Faville, Albert Schroeper, S. Schmatttcher, A. G. Headman, J. S. Fairweather.

The minutes of the meeting held on February 19, 1921, were read and approved.

No unfinished business was taken up.

The Committee on Education read a progress report.

A letter from the Kansas City Chapter in reference to the Kansas City Memorial Competition was referred to the Committee on Competition.

A letter from the General Contractors in regard to the Tenable Law was referred to the Legislative Committee.

A letter from the Illinois Chapter in regard to Housing referred to Legislative Committee.

A letter from the Southern California Chapter submitting the name of Mr. Edwin Bergstrom as a candidate for membership on the Board of Directors of the A. I. A. to represent the West, was endorsed.

A communication from Mr. Henry H. Kendall relative to Mr. Coolidge's visit referred to the Directors.

Motion made and seconded that Mr. E. A. Coxhead be made chairman of committee in reference to drawings for Institute exhibition.

Motion made and seconded that Mr. Wm. Mooser take up with the General Contractors a letter addressed to Mr. A. G. Headman.

There being no further business before the Chapter, the meeting adjourned at 10 p.m.

J. S. FAIRWEATHER, Secretary.

WASHINGTON STATE CHAPTER

Special Meeting

Minutes of special meeting of the Chapter, held at Frederick & Nelson's, 12:15, February 17th.

Present: Alden (presiding), Schack, Ford, Willatzen, Cote, Field, Siebrand, McClellan, Albertson, Baeder, Wilcox, Huntington, Loveless, Sexsmith.

President Alden read Secretary Parker's letter of October 27th, regarding the proposed addition to the Competition Code.

General discussion followed, during which Mr. Willatzen sketched the development of the present code and spoke as not in favor of the proposed addition because it allowed a recurrence of the old difficulties which were common before the present code was drawn.

Mr. Loveless took exception to this point of view and felt that it was perfectly legitimate for an architect to render services according to the revision as outlined, because each man is serving on an equal basis with the others and is being paid for the service he renders.

The Secretary read from the Journal of February, 1921, regarding the proposal to revise the code, mentioning particularly the last paragraph in the article, which dealt with the opinions of the Boston Chapter Committee.

Several of the men present also felt as it was expressed in the above-mentioned paragraph, that it was quite possible for two or three to work abreast as well as tandem.

Mr. Willatzen moved, and Mr. Loveless seconded, the motion that the Washington State Chapter approve and accept the revision as outlined in Mr. Parker's letter, with the following addition, after the words "held to exist" add the words "within the meaning of the Code." Carried.

Mr. Albertson moved, and Mr. Wilcox seconded, that the revision apply only to buildings to be built by private individuals.

The motion was carried.

Moved by Mr. Field, seconded by Mr. Huntington, that the matter of the Small House Service Bureau be referred to a special committee for consideration and report. Carried.

The chairman mentioned the possibility of obtaining Professor Picoli of Padula, Italy, to speak before an informal meeting of the Chapter at noon Friday at the Rainier Club.

The Secretary was instructed to announce this meeting to the members of the Chapter not present.

Adjourned.

H. O. SEXSMITH, Secretary.

WASHINGTON STATE CHAPTER

26th Regular Meeting

Minutes of the Chapter meeting of March 4th, held at Frigate Whistle, 6:30 p.m.

The reading of the minutes of the previous meeting was waived.

Secretary read a letter from Mr. E. D. Madden of Friday Harbor, regarding the erection of a memorial there in memory of the sailor and soldier dead who lost their lives in the world war. After discussion was moved by Mr. Mr. Svarz, that the Chapter institute a competition among Chapter members for the design of such a memorial, provided the committee of Friday Harbor find this plan acceptable. Carried.

The Secretary read a letter of thanks from the family of Mr. H. B. Pearce relative to the death of Mr. Pearce.

Mr. Storey explained the circumstances regarding the application of Mr. George Stoddard for Associate membership, Mr. Baeder moved, and Mr. Siebrand seconded, that his application be placed in the hands of the Membership Committee for the proper action. Carried.

President Alden asked that the members of the Chapter join the National Fire Prevention Association. Mr. Baeder suggested that the Draftsmen might find it advantageous to join, to prevent being fired.

President Alden reported for the Auditor that the accounts of the Treasurer, Mr. Park, were in satisfactory shape.

Moved by Mr. Huntington, seconded by Mr. Josenhans, that the report be accepted. Carried.

Moved by Mr. Cote, seconded by Mrs. Svarz, that a vote of thanks be given to Mr. Schack for his excellent services as Treasurer during the year 1920. Carried.

The President read tentative assignments to committees for the year 1921.

Mr. Field, as Trustee for the permanent fund, reported the sum of $215 on hand. The report was accepted.

Moved by Mr. Huntington, seconded by Mr. Svarz, that the interest on the permanent fund for 1920, plus an amount from the general fund, sufficient to make $25, be used to institute a competition among Draftsmen for the soldiers and sailors monument, before mentioned, at Friday Harbor.

Mr. Field amended, that this motion be made as a recommendation to the Executive Committee. Amendment accepted. Carried.

At this point Mr. Hewitt Wilson of the Ceramics Department at the University of Washington was introduced by the President and gave the Chapter members a very interesting and lively talk on Ceramic problems.

Mr. Loveless submitted a report of the Special Committee on the Small House Service Bureau, which urged the establishment of such a Bureau by this Chapter.

Moved by Mr. Loveless, seconded by Mr. Huntington, that the report be adopted. Motion carried.

The Secretary read a communication from Mr. Albertson in which he proposed to raise the income of the Chapter by a variable apportionment of dues, based on the amount of business passing through the office of any one member of the Chapter, apportioning dues on the basis of ability to pay. Specifically, proposed to reduce the annual dues to $15 and charge each member $1 for every $10,000 worth of business passing through his office, the cost of the job to be taken from the cost filed with the building permit.

It was moved by Mr. Huntington, seconded by Mr. Josenhans that the proposal, since it was not mandatory in any way, be adopted for one year, and be without any reduction in the dues and that a committee be appointed to canvass the Chapter to determine if the proposition would be feasible. Motion carried.

The President read for discussion, the amendment to the By-Laws regarding the date of regular meetings.

Mr. Stephen reported in regard to the reappointment of the present State Board of Architect Examiners, and after some discussion, the Secretary was instructed to write to the Governor asking that the Governor reapoint the present board.

Moved by Mr. Josenhans, seconded by Mr. Field, that Mr. Stephen's report be accepted. Carried.

Mr. Loveless brought to the attention of the Chapter the fact that at a formal meeting it had been decided that the Chapter hold a joint meeting with the Draftsmen, which had not thus far been done.

Meeting adjourned.

H. O. SEXSMITH, Secretary.
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Business Manager—E. D. McDONALD.

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GENERAL BUILDING NOTES

San Francisco's Building Expansion

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The editors will be pleased to consider contributions of interest to the Industry. When payment for same is desired, this fact should be stated.

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Long Beach
Hollywood

Enamels
Los Angeles
Santa Monica
San Diego
Pasadena
Salt Lake

Varnishes
Portland
Seattle
Tacoma
Spokane
Boise
THE EVOLUTION OF A COLLEGE TOWN

By Harris Allen.

The people of Palo Alto ought to be pleasant neighbors, is true that environment affects character. Its streets are placid, peaceful charm—I had almost said repose, Palo Altans would not forgive me if I had hinted that they were asleep, and it would not be true. They are quite awake, to the possibilities their magnificent oaks, their soil, and their balmy climate afford in the way of den and home-making.

Street after street unfolds a vista of shady trees, velvet lawns, glowing parterres of color. It just shouldn’t be possible for children to turn out badly, who have grown up in the midst of this profusion of bloom and fragrance. Thinking back to the early days of Stanford University, when Palo Alto was a forlorn little huddle of common-place houses in a flat, open clearing, it is hard to realize that this can be the same place. But twenty-five years in California can perform miracles.

As you drive down the wide main avenue that runs indefinitely from the highway and the station, after you leave the business section there is one of the newer homes which
attracts instant attention. Mr. Branner has been fortunate or persistent, in securing just the right setting for Mrs. Hughes' house. A level lawn, of noble spaciousness, sweeps up to a facade which is classic in effect if not in detail, with its long unbroken lines, its symmetry, its broad surfaces and simple openings. A narrow brick terrace forms a solid base, and the formal potted trees emphasize the composition. Perhaps the entrance columns are a bit too sturdy for the thin shelf of cornice, shorn of its frieze and architrave, and the delicate iron railing. The urns give a decorative note relieving the restraint of the facade.

Quite different is the home of Dr. Houston on Coleridge street. Built of brick and shingles, with many grouped casements, its elements are mixed in an apparently hap-hazard way that produces somehow the effect of simplicity and distinction. There is that elusive something we call "character" which some of the modern English architects attain so delightfully. One would not be surprised, to be told that Lutyens had designed it; and certainly not, to learn that its architect, Mr. McCrae, is of English origin.

It is quite impossible to describe this house; even the photographs are inadequate to convey the charm of every part. For both outside and inside have been developed with a loving consistency which has no element of the "store decorator" or "landscape gardener." My apologies to these worthy men; they have been responsible for great advances in the appreciation of art. But they could not have achieved the personality that stamps the Houston place...
special views of the gardens and a bit of the interior are
given elsewhere in this issue, with some slight description.

Another house of picturesque mass is the A. T. Cluff
residence on Lowell Street. Its generous expanses of roof,
tabled and hipped in modified English style, its broad
brick terrace, shadowed by great oaks, its arched, recessed
entrance, under the climbing stair casements, are very
pleasant. The simple lines of its garden front face a long
sunny stretch of lawn which will some day be sheltered
by a green wall of trees and shrubbery.

It is not much of a jump to New England, by way of
the quaintly informal W. H. Houston house on Waverly
Street. The irregular gables and dormers, the slender
white porch columns, framing long small paned glass doors,
form an inviting picture. A straight brick walk divides
the flat lawn, and the embracing trees remind you of "im-
memorial elms." Mr. Ross Faxon lives in a comfortable
unpretending shingled house on Lowell Street, whose broad
hipped roof covers its various surfaces in a deep-breasted
motherly way. Of a more Colonial symmetry are the Find-
ley house, on Webster Street, which, however, has suc-
cumbed to the West by providing trellises for the riot of
roses, and has an over-hanging hood and brackets, rather
heavy for the fine detail of its fan-lighted entrance, and the
altogether charming Briggs house on Lowell Street. This
preserves a strong Colonial feeling in spite of changing
double hung windows to long casements, and projecting
porch to delicately arched recess with columns simulated by
applied lattices. This entrance, with its audacious inversion of a porch, and the suggestion of high-boy scroll work under the upper windows, as viewed under the arch of overhanging boughs is like a fascinating stage setting of some idealized Martha's Vineyard.

Echoes of the prairies come with Mr. Haehl's house on Lowell Street, which, though transplanted, seems to thrive and harmonize with its setting of lawn and ivy—thanks perhaps, to the continued horizontal lines.

It is perhaps not quite fair, yet, to picture Mr. Johnson's delightful little Italian villa on Webster Street, with...
he softening effect of flower and foliage growth which comes so quickly and easily in this favored climate. But the picturesque surrounding oaks give an unusual charm to the masses of stuccoed wall—the grouped, many-paneled openings—the deep embrasure of the massive entrance. The plan, too, is an achievement worth note in its efficiency and economy of arrangement. This is one of the newest additions to Palo Alto homes, but it carries on the quality of distinction without ostentation which may well typify the seat of a great University.
San Francisco faces the necessity for doing big things in a big way. Its natural advantages are unapproached by any other western American city. The ability of this city is also unquestionable, for the citizenship that rebuilt a great city and put on a world's exposition within five years of the greatest civic catastrophe of modern times can achieve any possible accomplishment when stimulated to its highest effort. These advantages and ability will not avail however, in a supreme contest, without the other essentials of top condition and strongest team play. The San Francisco Program is an endeavor to learn and provide the essentials for putting this city in the best possible condition, and for the development of the strongest team activities. Six features only are involved: (1) good city structure and facilities; (2) the best condition of living; (3) energetic business development; (4) securing new population and industries; (5) good government, and (6) providing the Greater San Francisco.

City Structure and Facilities

The outstanding physical facts regarding San Francisco are its peninsula location and hill areas. The Twin Peaks Range bisects the city north to south and a series of ridges practically connect this range with the Bay, cutting the city into a number of strongly isolated districts. This situation and other conditions, such as the checkerboard plan of street layout, regardless of grades, and the twenty-five foot lot, create certain situations of structure that must be corrected before this city can possibly achieve a great advancement movement.

The area immediately south of Market Street presents an ideal location, with certain improvements, for a great wholesale, loft industry, light manufacturing section. It is located between the mercantile center and the natural industrial sections of the city, at a point of short delivery distances, with its own waterfront and immediate access to all three transcontinental railroad systems. But the proper development of the section is stopped by Rincon Hill. This small steep ridge cuts off the district from its waterfront, prevents the required provision of rail facilities, congests Market Street and makes a large area unproductive. The removal of Rincon Hill is essential to the development of a most important business and industrial section of the city.

The city is cut squarely in two in the center by the Islais Creek mud flats, connecting with Bernal Height and (with a short intervening gap) the Twin Peaks Range. Only a single direct route connects the northern with the southern areas across this barrier, a street along the Bay front.

Any great industrial progress for the city absolutely requires the reclaiming and replanning of the Islais Creek flats. An industrial section of many hundreds of acres most advantageously located, and with the best facilities would thus be produced. But much more important would be the opening of direct through routes and transportation facilities between the city and the natural industrial districts immediately south. The elimination of this barrier now cutting its territory asunder is essential to any great building of the city to the south.

The Hunters Point area offers a perfect opportunity for the development of a great industrial terminal of the Busl Terminal Type. With modern development it offers deep water dockage, direct facilities of three continental rail roads, a broad level area for industries, contiguous hill areas ideal for modern home districts, and short levee routes (with Islais Creek improved) to the wholesale and business centers of a great city. Such industrial terminals form the principal bid for manufacturing expansion of the
great harbor cities the world over at the present time. Such a terminal is vital to great manufacturing development for San Francisco.

San Francisco's harbor is its principal asset. Each of the projects mentioned will add an important section to the harbor frontage. Corresponding provision of facilities and progressive harbor management must go hand in hand with these extensions and San Francisco must immediately secure the establishment of a free port here when national legislation permits.

Several of the isolated districts created by the hill ridges form natural sites for the growth of important residential districts. They remain unoccupied because of lack of direct through streets and street car transportation. If this city is to achieve the balanced development of industrial and home growth essential to its greatest success, these districts must be made available and occupied. Laid out as they are on the checkerboard plan, and in twenty-five foot lots, they require replanning to permit modern district development if they are to compete successfully with other districts. Certain direct streets, street car extension and an enabling act permitting the city to replan unoccupied area are therefore essentials in San Francisco's progress.

The most important direct route streets required to adequately connect and permit free development in the various districts may be listed as follows: A new diagonal striking the waterfront at lower Rincon Hill, and joining Market Street near the Civic Center. This would relieve Market Street congestion, giving a long section of the waterfront a main connecting artery now lacking, shortening delivery distances from the wholesale section and permitting a high stage of development in a now poorly occupied section.

The only direct route between the city and its southeastern areas is Mission Street, which cuts through the break between Bernal Heights and the Twin Peaks Range. Mission Street is already badly congested at rush hours. An additional southeastern artery is now needed, and is essential to the future, and may be inexpensively provided, running through Bernal cut, connecting at both ends with San Jose Avenue, and again following the old Southern Pacific line for a short distance, tapping the wholesale district and giving this district a special through route.

Van Ness Avenue offers the only broad, straight cross-town route of easy grades, but it comes to a dead end in the middle of a block on Market Street, compelling all through traffic to make three turns and stopping two important flows of traffic. Continuation of Van Ness Avenue for only one block across unimproved property would connect it on practically a straight line with Mission Street, and a two-block continuation would connect it with Howard Street, giving crosstown through routes of great value.

The abandoned line of the Ocean Shore Railroad offers opportunity for a direct route connecting the future southern industrial districts with several square miles of ideally located and gently sloping hill areas for the building of modern workmen's home suburbs. The building of this inexpensive artery is important to balanced development of industrial districts and could easily be continued to give a direct route to hill areas below the Twin Peaks now entirely lacking such convenience.

The Sunset area may be taken as a glaring example of the result of improper planning and lack of direct routes and transportation facilities. Compare the stagnation of this area with the remarkable development of the past few years in the west of Twin Peaks district for a showing as to the value of modern planning and direct transportation.

Conditions of Living

In the long run, a city is dependent upon the individual achievements of its citizens for its own success. But the city largely determines how far these citizens may achieve, by offering opportunity and stimulus toward efficiency of body, mind and spirit.

San Francisco presents many fine features of good conditions of living that may add greatly to these achievements along a number of lines. More adequate school facilities are urgently required, and extensions of education, particularly along vocational and industrial lines; also the wider use of school plants in advancement of community life. The extraordinary recreation advantages of this city—its year-round availability of outdoor sports and surroundings of mountain, forest and sea—are tremendous health and happiness assets, but only as they are utilized. (Continued on page 94)
They were both fond of England, and for years they discussed the possibility of creating for themselves a home like those they had seen and loved in the English countrysides. The location of some fine oaks first attracted them, so they bought the property, which covered about two acres and was on a corner.

Then for a year they dreamed a garden. Gradually it took shape on paper, and the house was given its place and designed and built to fit the general scheme of things. All the living rooms give directly to the garden; four sleeping porches are perfumed by the fresh flowers that grow below or climb beside.

At all times possible—and that means most of the time, the year around—the family life is out of doors. There are special gardens for each need and occasion. The variety of vistas, of secluded nooks, of open spaces, gives the effect of an extended estate many times the size the grounds really cover. There is a big square lawn surrounded by low brick wall, with arched openings on three sides. Here, beside the house, are the garden parties, the afternoon teas; one can bask in the warmth of the sun, or seek the shade of the big trees along the walls. After dinner, in the evening, it is easy to stroll out on the lawn or loggia and have coffee served there, while cigar tips glow brighter and brighter, like friendly fireflies, in the twilight.
At the end of a walk, or under some tree or arbor, one finds garden furniture—chairs, a table—chosen to fit the particular location; what that spot demanded. There is a play house and garden for the children, where they can cook meals in a stove, or roast chestnuts in an open fireplace, or give "plays" on a little stage, or build sand cities. There are little secluded sunken spots, that seem in the heart of the country, although the city street is but a few feet away. The thick growth of rock rose, honeysuckle, leptospermum, make a room open only to the sun.

A stone-flagged walk is banked by the rich colors of dahlias, with rows of cherry trees further back. In the heart of a rose garden—and who has not seen Palo Alto in rose-time has missed rare joy—is a simple sun dial. Beyond are bushes of nandina, with some tubs of hydrangea; these, indeed, are scattered in judicious spots all around the garden.

Back of the walled garden, under the shade of the oaks, is a yellow glow of primroses, flags, foxtgloves, and other varieties of hydrangea. Flanking an arch which faces the house, are great masses of laurestina, white and pink.

A round croquet lawn is away by itself, with border of changing flowers and shrubs. Even the vegetable gardens are lovely pictures, framed by leafy arbors of vines and berries.

This delightful place has caught the finest, loveliest spirit of England—where "a man's house is his castle"—and the atmosphere is redolent of happy, gracious home life.
MESA, ARIZONA

LATTER-DAY SAINTS' TEMPLE

YOUNG & HANSEN, ARCHITECTS,
Salt Lake City, Utah
DINING ROOM

LIVING ROOM

PALO ALTO, CALIFORNIA

RESIDENCE OF MRS. E. C. HUGHES

J. K. BRANNER, ARCHITECT
PALO ALTO, CALIFORNIA

RESIDENCE OF MR. A. T. CLIFF

CHARLES K. SUMNER, ARCHITECT
Palo Alto, California

Residence of Dr. A. J. Houston

Geo. E. McCrea, Architect
Palo Alto, California

Residence of Mr. J. M. Johnson

Chas. K. Sumner, Architect
AN ENGLISH HOUSE IN CALIFORNIA

The "Period" type of furnishing, which gave the air of hotel or museum to so many American homes, is passing. It is almost safe to say that it has passed, together with other symptoms of the nouveau riche period of American development.

But a house may still be furnished in a definite and consistent manner throughout, adhering to one country if not to one period, without meriting the reproach of lacking individuality, of being stereotyped.

The photographs here reproduced prove this statement clearly enough, although they give but a slight idea of the personality of the house, the atmosphere of homeliness, the charm of color and texture and scale. Here is an English house set in an English garden, with rooms consistently English in architecture and decoration and furnishing. Yet there is nothing set, nothing stereotyped about these rooms; they are pre-eminently livable; they have the domestic quality that marks the delightful English country homes, together with those subtle earmarks which indicate the character of the occupants.

The living room is paneled in redwood to about two-thirds its height, treated with a very dark stain, and waxed. From the wainscot to the heavily beamed ceiling the wall is covered with grass cloth. The predominating color tone is set by the oriental rugs, and is a warm shade between mulberry and old rose; this is repeated in the big-flowered linen hangings and coverings. Occasional green velvet cushions, the sheen of brass and copper, and the rich colors of flowers enrich and enliven the treatment. The house is always full of flowers; from greenhouse and garden comes a succession of bloom the year round.

The carved oaken furniture is almost entirely copied from old museum pieces, and there is just enough of it to balance the overstuffed chairs and davenport and window seats, and together to produce the effect of comfort and spaciousness which makes the apartment a real "living" room.

The billiard room is frankly informal and playful; it is a room for the whole family to gather in and strew their belongings about, books, toys, ashes, music. There is an alcove for the piano, and a wide jingle nook whose generous brick ledges and wood shelves are bright with brasses and glowing color of tile and porcelain and flowers. The wood walls and raftered ceiling seem to fit the floor of big red quarry tiles; and all one wall consists of French sash giving directly to the square walled garden, with its green expanse of lawn shaded by great oaks. How could hours be passed in a more delightful environment?
THE BILLIARD ROOM

Residence of Dr. A. J. Houston

Palo Alto, California
THE BUILDING REVIEW

THE LIVING ROOM, TOWARD LOGGIA AND HALL

PALO ALTO, CALIFORNIA

THE BILLIARD ROOM INGLE,
RESIDENCE OF DR. A. J. HOUSTON

GEO. E. McCREA, ARCHITECT
The opportunities are all too little known to citizen and visitor alike, and require much publicity and organization before they can be utilized to anything approaching their possible values.

Compared with the great Eastern cities, San Francisco possesses strong advantage in its comparatively low cost of living, and low cost of attractive home construction. Sufficient effort should be made to continue and increase the advantage of low cost of living. Practically every great industrial city of the East has recently organized large projects for the building of workmen’s home sections, seeking to provide a maximum of comfort with a minimum of cost. San Francisco requires similar projects in the immediate future.

**Business Development**

A high average of business success is essential to rapid city progress. The standards of living essential to an achieving citizenship are possible only with a high general level of income, which can be paid only by progressive and successful business enterprises.

San Francisco has a number of special opportunities for direct business development.

This city has the largest local market, both in size and purchasing power, in the Far West. This market can be made a very substantial aid to the success and growth of the industrial and mercantile community. A home products exposition organized with sufficient showing of the community life and industry and with adequate features of entertainment can be so arranged that it will stimulate appreciation of their city by the people of San Francisco, and will greatly increase the value of the home market.

Trade trips, expositions, study of foreign markets, cultivation of relations abroad, and a very active organization for foreign trade development—these are essential parts of the San Francisco program.

Modern business has become highly systematized and scientific. Research and experiment and exchange of information are continually opening new avenues for securing greater business success. It is proposed as part of the program to create a great information service that will secure contact with all of these movements and sources of information and keep the business enterprises of the city in contact with the best of such work.

**New Population and Industries**

Any living organism is faced with the necessity of securing growth in powers or stature or an inevitable falling back. Any city must achieve a healthy growth for continuing success. A rapid advance in size and power is essential to San Francisco.

A line of intensive industrial surveys is to be made. These will disclose special opportunities for new industries, give the information for preparing careful briefs regarding them, and provide a reservoir of information from which detailed information service can be given regarding mercantile, industrial and civic question.

With full information in hand and briefs prepared, the industrial advance of the city becomes a matter of follow-up and salesmanship. The San Francisco program provides these through the creation of a modern industrial promotion bureau, adequately manned and equipped for its work.

**Good Government**

The relationship of good government to city progress is just beginning to be understood. We commonly turn over to city government such important functions as education,
health protection, recreation, conservation of life and property, and the furnishing of great groups of utilities and public structures. There is no other group of services equally vital to conditions of living and individual efficiency. It is the common observation of students of public efficiency that American city government is not giving more than 50 per cent of reasonably to be expected results through public expenditures. At the same time practically every American city is finding it impossible to furnish needed services and public works, and they are therefore falling far short of achieving the best conditions for success.

San Francisco shares these difficulties in common with other American cities, and the common remedies must be supplied here. Archaic organization and business methods fixed by law are very generally preventing even the best men from giving high grade service through governmental departments. A reorganization following the basic laws of good organization practice, and permitting the adoption of modern business methods is required.

Wide education of the people of San Francisco to the importance of governmental affairs as their own affairs, and stimulus of active citizen interest, are basic essentials to a great forward movement for this city.

The Greater San Francisco

Every city is the center of a district. Its energies are largely engaged in satisfaction of the economic demands and transaction of business originating in that district, and its importance is measured most directly by the size and development of the territory which swings within its economic and social influence.

San Francisco, properly speaking, is not the incorporated city of San Francisco, but the entire San Francisco Bay District. The Bay District is a business and social unit. What helps one part helps all. The structure, facilities, living conditions, and vigorous industrial development outlined in the San Francisco program are intended for provision for the whole Bay Region. Only in all-round development of this entire district can San Francisco hope to achieve its greatest future. The future San Francisco is also tied up to the progress of Central California, and only in a lesser way with that of the whole mountain and Pacific Coast region. The best agricultural extension and occupancy, good roads, forest and mineral development, and active progress of the towns and cities of the region, are important to San Francisco and also offer opportunities for a group of practical and effective services on its part.

The program outlined will at first thought appear large and complicated. As a matter of fact, it is not one of extraordinary difficulty, nor one which San Francisco need approach with hesitation. The various tasks proposed are completely interlocking. Each will greatly assist the other. It will be seen by examination that if four or five of the projects are successfully undertaken during the first year, each will make two or three others easily feasible in the second year, and each of these will make further progress possible in the third. No great campaign for funds is required, the more expensive parts of the work being self-financing. The entire program has been carefully studied and presented as distinctly possible of accomplishment within a five-year period, and nothing is proposed that is not easily within the possibilities of this city.

If the program is right, it is only a regular business job for San Francisco to carry it through.

It offers a movement in which all citizens can unite, both from the motives of self-interest just outlined, and from the broadest motives of humanitarianism, civic pride and patriotism. The destiny of the American nation lies with the American city. If San Francisco achieves its ideal of size and service great opportunities are ahead for all its people; the best foundation that could be provided is laid for the future success and happiness of its children; it will blaze trails for American city progress that may vitally influence national history.

San Francisco's building expansion, which last year totaled over $42,000,000, including all classes of construction—street work, Hetch Hetchy water supply, public improvements by the Municipality, the State and the Federal government and private enterprises—is only an earnest of the new construction that will have been completed in 1921, if all signs of the times do not fail.

The staccato music of the riveter in no year since those immediately following the great fire have sounded so universally, from the Embarcadero to Twin Peaks and from North Beach to the Potrero, as it does in these busy spring days.

The roar of this peace-time drum, which constantly swells in volume, signaling the march of San Francisco toward its destined place in the commerce of Pacific nations, is especially impressive when the roll is called of the great new structures that recently have been completed or started.

Among such buildings are numbered the California-Commercial Union Insurance building, foundations for which at the northwest corner of Montgomery and Pine streets are rapidly being completed which will cost approximately $1,500,000. This building heralds the pre-eminence of San Francisco in the insurance world, the city being the clearing house of $200,000,000 of insurance business done annually west of the Rocky Mountains.

Last year California re-captured the pennant for petroleum production, with an output valued at $106,473,560, and as if to mark this tremendous production with exclamation point in stone and steel, the Standard Oil Company of California is about to erect a $4,000,000 building at Bush and Sansome streets, opposite its present outgrown building.

The new Federal Reserve Bank building now going up in the block bounded by Sansome, Sacramento, Battery and Commercial streets, is really a monument to San Francisco's financial supremacy on the Pacific Slope. The building will cost approximately $200,000; it is said, though no authoritative figures are available, the new Bank of Italy building, just being completed at the corner of Eddy and Powell streets, costing well over $1,000,000 and the First National Bank addition in Montgomery street, costing $350,000, sound the same note in San Francisco's expansion as a financial market for Pacific nations.

But San Francisco is much more to the Pacific Coast and the nations across the sea than a financial center. It is the great amusement and recreation city for the thousands of travelers who annually visit it from every part of the world. San Franciscans themselves demand the best in drama and amusements.

To supply this constantly increasing demand work has been started, or is about to start, on a half dozen theatres, each to cost $1,000,000 or more.

Loew's State Theatre, at Market and Taylor streets, on which work is now proceeding, is to cost $1,500,000.
The Junior Orpheum theatre, Golden Gate avenue and Taylor street, is to cost $1,000,000.

The Granada, at Jones street and Golden Gate avenue, is to cost $1,000,000, and the Ackerman Harris theatre, at the northeast corner of Powell and Post streets, is also to cost $1,000,000.

Still another million-dollar structure planned is the Portola, to be built on the present site of the motion picture house of that name adjoining the California theatre in Market street, near Fourth.

To accommodate the demand for offices, a demand which the advance made by San Francisco during the last year in export, import and shipping greatly augmented, many new office buildings have been started.

Among the larger of these are the Crocker Estate building, a fifteen-story structure, at Montgomery and Bush streets, calling for an expenditure of approximately $300,000; the Sharon Estate building at Howard and New Montgomery streets, which will cost in excess of $275,000; the California Pacific Realty building, in Bush street, east of Montgomery, which will probably cost $150,000.

Exceeding in floor space all of these, the fifteen-story Balfour building has been erected at the corner of California and Sansome streets at a cost in the neighborhood of $400,000.

To aid in housing and assembling the vast volume of goods that comes and goes through the Golden Gate, not to mention the tremendous supply that is required locally, warehousing is a vital need. To meet the imperative demand for facilities of this kind, the Southern Pacific Company is building in the block bounded by Third, Fourth, Channel and Berry streets, an enormous warehouse, costing over $1,500,000, for the special use of the wholesale grocery trade. The San Francisco Chamber of Commerce initiated the negotiations between the railroad company and the wholesale firms, who will lease it, and brought these negotiations to a successful issue.

Carrying toward completion the magnificent $20,000,000 construction plan of the Civic Center, work is now nearing completion on the California State building on the north side of the plaza. This edifice, rising in massive dignity on McAllister street, will house the many State bureaus and departments which are now scattered through the city. The cost is expected to exceed $1,500,000.

These are but random selections among scores of new structures which are either completed or started, and citations might be continued indefinitely. The buildings mentioned are enough to stress the construction revival that has started in San Francisco.

An analysis of building construction last year, prepared by the industrial department of the San Francisco Chamber of Commerce, shows that permits and applications received for new office buildings and stores totaled more than $8,000,000.

Industrial plants, including factories, garages, shops and warehouses amounted to $4,328,154. Industrial and commercial, in which both functions are sometimes united, aggregated nearly $3,000,000 more.

Public buildings, in which category is included clubs, churches, libraries and schools, totaled almost $1,500,000.

Theatres amounted to several millions, the extent of this type of construction not being indicated in the theatre class for the reason that the upper floors of some of the larger structures will be devoted to office and commercial uses.

It is in home building, however, that San Francisco is making a specially fine showing. Dwelling houses alone last year aggregated more than $6,000,000, apartment houses amounted to $1,379,910, and flats to a little more than $1,000,000.

The San Francisco Chapter of the American Institute of Architects, at a special meeting called for the purpose of considering existing conditions in the building industry of this city, has passed the following resolution:

Whereas, A Board of Arbitration, selected by the Chamber of Commerce, the Builders' Exchange and the Building Trades Council, all of San Francisco, has, in accordance with the articles of agreement of said arbitration, rendered a decision involving the wage scale of certain trades, which wage scales were in dispute; and

Whereas, The Building Trades Council has repudiated its agreement to abide by such arbitration, thereby creating an intolerable situation in the building industry of the city; therefore, be it

Resolved, That the San Francisco Chapter of the American Institute of Architects unanimously endorses and supports the stand of the Chamber of Commerce, namely: that this decision of the Board of Arbitration must be carried out by the contracting parties thereto, in accordance with their signed agreement.

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SYNDICALISM ACT SUSTAINED
(From "Pacific Builder and Engineer")

The supreme Court of Washington has sustained the syndicalism act passed by the 1919 legislature in affirming the conviction of Mike Hennessey, convicted in the superior court of Clarke County. Prosecution of Hennessey was based upon his affiliation with the Industrial Workers of the World. The reasoning of the court is so clear and sound that it is worth quoting. It is particularly appropriate also that it should be given the widest publicity at this time when an effort is being made to have the statute repealed. In answer to the contention of the defendant that the syndicalism act is an attempt to punish constructive treason, the court holds the fact that treason as defined by the federal constitution does not deprive the state legislature of power to enact laws to prevent the teaching of crime, violence or sedition as a means of overcoming the existing order of government, and while the federal government has ample power to protect its sovereignty, it does not follow that the state may not pass laws for the purpose of aiding or assisting the national government. Nor is there anything on the face of the act, according to the court, to justify the contention of defendant that the act is class legislation, as it makes any person of whatever calling liable to punishment for its violation.

To argument of counsel for defense that the act infringes on the personal liberty of the citizen in violation of constitutional guarantees, the court answers that if the legislature had power to make it unlawful to do the things prohibited in the statute, it had the power to make it an offense to become a member of a group or organization formed for the purposes so prohibited, and holds that the law-making body did not exceed its power when it made affiliation with such a group a felony.

How to make real profits, not paper profits, how to get facts on which to base prices in a falling market, are among the problems worked out in a new University of California correspondence course in accounting for contractors and dealers.

The instruction consists of articles in the "Journal of Electricity and Western Industry," published in San Francisco, and requires no further textbook. The Extension Division, from its office at 301 California Hall, Berkeley, mails supplementary material and problems to enrolled students, and corrects and returns the students' work.

While the examples in the bookkeeping lessons generally use terms of an electrical business, the instruction will be given on such broad lines that it will be valuable to persons in any contractor-dealer business.

The accountancy course deals with double entry bookkeeping. "Double entry," the course explains, "is merely a scheme by which complete information is recorded in a manner which ordinarily proves the arithmetical accuracy of the record. Any person with a good knowledge of arithmetic can learn the double entry method of keeping accounts. The double entry system is not expensive to install or to operate."

A standard accounting system prepared by the National Association of Electrical Contractors and Dealers is used in Mr. Kelly's course, with amplifications and explanations to make it adjustable for any practical business.

A STATEMENT FROM WILLIS POLK

The failure of the Arbitration Board to conciliate the contentions between the contractors and the artisans and laborers of the Building Trades is not surprising. The eminent personnel of the Arbitration Board, composed as it is of the archbishop, an ex-justice of the supreme court, and an efficiency expert, was designed to command the respect of both parties to the controversy. But it didn't work.

Price-fixing, whether by combination of private corporations, or by government commission, or by boards of arbitration, can never be more than mere devices. The stress of war compelled the government to regulate prices along the very lines adopted by private corporations, which were so roundly denounced by the government itself under pre-war conditions. The trouble at the present time is that we have not yet returned to peace conditions, and the labors of the Arbitration Board in this case apparently lead them to apply "slide rule measurement" on the cost of living, and they reached a conclusion that wages ought to be described 7½ per cent in the building trades in this territory. The real solution of the problem will be a return to healthy, normal, keen competitive methods in the building industry. As long as cost-plus operations are carried on, there can be no real incentive on the part of the cost-plus contractor to exert his full energy and employ his keenest ability in competitive methods as under direct contract conditions to achieve economical results in construction cost. Granted that labor has actively engaged in the merry game of combining for purpose of price-fixing, labor itself would with equal cheerfulness engage in the merry game of competitive quest for an honest day's pay for an honest day's work.

James T. Narbett has opened an office in Room 503, Easton Building, Oakland, to practice architecture. This will be operated in conjunction with his Richmond office.
For many months Dr. R. M. Rastall, a distinguished industrial engineer, has been engaged in a survey of San Francisco at the instance of the Chamber of Commerce. A condensed summary of his report appears in "The Building Review" this month, and is worth careful attention, not alone from San Franciscans, but from inhabitants of all cities that desire to grow and develop properly.

Dr. Rastall's report is a model of clear seeing, clear thinking and clear speaking. It is a definite statement of obstacles to be overcome and methods to overcome them. It is logical, practical, sensible. It deals with essentials which are possible of accomplishment within the next five years, although not overlooking undertakings which are highly desirable for the future.

The fulfillment of this program will not only bring added prosperity to San Francisco and all California, but will better living conditions, and especially to the great majority of population, people of modest means and income. The developing of great industrial residence areas forms one of the most important parts of the program, united with added facilities for education, recreation, and transportation; and the necessity of good government as a sine qua non.

The importance of this industrial survey cannot be over-estimated, and its completion just at the time of the union of all central Californian interests in a campaign of expansion should bring into play the concerted team work which is essential to carrying out Dr. Rastall's program.

Most architects, as individuals, sympathize with members of the building trades in their healthy desires to better themselves. They are all fellow craftsmen; and the architect's vision must necessarily be better executed by craftsmen who are not discontented, discouraged, worried, ill-nourished, but who can put interest and energy and concentration into their work. But architects also, have a duty as a class, to the public, to their clients, and to their own profession, which demands a high standard of honor and obligation; an architect's word must be kept inviolate and he demands the same trustworthiness from his fellow craftsmen. "Responsibility" is the foundation upon which the whole building industry must rest. Otherwise it can not stand.

From this standpoint, therefore, the architects of San Francisco have felt it their duty to uphold the agreement which created the Labor Arbitration Board, and its decisions in accordance with that agreement.
ARCHITECTURAL DIRECTORY

For the benefit of readers and advertisers we will publish each month a portion of the revised list of Architects, Designers and Architectural Engineers of the Western States.

(For information concerning copies of the complete list write "The Building Review".)

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C. B. Bradshaw, 262 North Glassell Street.

San Jose
A. B. Clark, care Stanford University.
R. W. Follmer, 465 Lytton Street.

Palo Alto
J. R. McFarland, 299 El Camino Real.

Saratoga
P. V. Tuttle, 560 Lighthouse Avenue.

Redlands
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B. W. Edwards, 408 Galena Avenue.

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Garvin Hodson, 19 South Fair Oaks Avenue.

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Robert B. Ogden.

Richmond
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G. S. Wilson, 642 West Ninth Street.

San Luis Obispo
S. G. Moore, 1 Virginia Street.

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San Mateo
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San Francisco
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C. C. Cluff, Ochsner Building.
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Minutes of the meeting held on April 21st, 1921, were read and approved.

Mr. Cote, moved the following was carried. Mr. Field reported for the Committee on Public Information that the Committee was invited to a meeting to be held at the American Institute of Architects building on April 25th, 1921, to discuss the matter of the Special Committee on the A. I. A. Newsletter.

Mr. Cote, seconded. Mr. Field reported that the Special Committee on the A. I. A. Newsletter was invited to a meeting to be held at the American Institute of Architects building on April 25th, 1921, to discuss the matter of the Special Committee on the A. I. A. Newsletter.

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# The Building Review

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Improved Electric Heaters

Western Industrial Development

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Axioms

ARCHITECTS must lead a double life—that of the artistic dreamer and that of the coldly-scientific career of the engineer. Their problems have only begun when the visioned ideas have hastily sketched themselves in the rough lay-out.

HUNDREDS of questions must be answered, stresses, strains, torsions, choice of building materials, ad. inf., present themselves for solution. Architects today have formulated for themselves certain conclusions regarding products which may be depended upon to render satisfaction.

IT is pleasing to know that, more and more, architects' specifications are reading ‘Fuller’s.’

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During the war one hundred housing projects were started in various parts of the United States by the United States Housing Corporation. Fifty of these projects were completed, one of the number being the housing project at Bremerton, including a large hotel costing over $500,000, an apartment house costing $250,000, two hundred and fifty houses costing over $1,000,000, and two school houses costing about $150,000. All of these buildings are permanent buildings. The project was one of the first completed, one of the lowest in cost of construction, one of the few that showed a revenue, and one of those that sold most readily and with the least loss to the Government after the war.

HOTEL

The hotel is four stories high, is the largest in the Puget Sound region, containing over 350 rooms, and measures about one-third of a mile around the outside wall. It is fireproof and solid mill construction. The hotel was planned exclusively for Navy Yard employees, not only as a place to sleep, but as a place to play and eat. It is connected directly with the Navy Yard and the men come and go to their rooms without going out of doors.

The fire exits, the plumbing and toilets, the heating, the kitchen equipment and other utilities were endorsed by dollar-a-year experts in the war service of the United States Housing Corporation, and received the scrutiny and endorsement of some of the best hotel talent in the United States, including the architect for the Pennsylvania Hotel in New York, the largest in the world.

Each room has hot and cold water, a sanitary closet, dresser, table, two chairs, medicine cabinet, mirror, window curtains, heavy brass single bed, and a rug on a naturally finished floor. Each room has an annunciator call, and telephone booths are provided in all the halls.

The ground floor contains the lounge half the length of the building, a large billiard room, two card rooms, barber shop, toilets, etc. On the ground floor is also located the housekeeper's operating rooms, sewing room, blanket stor-
age, linen stores, soiled linen room, storage, closets, and electrically operated laundry with every mechanical means for handling the needs of such a building.

In the center of this floor is located the highly efficient, sanitary and modern mechanical kitchen, with every device to aid in the preparing of wholesome meals. It has full daylight, mechanical ventilation and refrigeration. It is divided into departments, consisting of butcher shop with electric meat chopper, the fruit and salad pantry with refrigerator, the buffing and silver storage, with electric buffing machine and silver washer, the dish storage department with electric dish washer, having a capacity of 8,000 dishes per hour. It has a separate department for the washing of glassware and a short order kitchen with an eight-foot range.

The main kitchen is equipped with thirty-two feet of ranges, two charcoal burners, steam vegetable cookers, steam stock pots, steam roaster, and many other minor labor-saving devices.

The dining room is equipped to serve 3,000 people in one and one-half hours.

The kitchen is equipped with sanitary tile counters, tile wall backs, brass rails and ceramic shelves, and has washable floors.

So when the Navy Yard workman is called in the morning by the ringing of his annunciator, after a comfortable night's rest in a comfortable and substantial brass bed, he steps out on his carpet rug, small though it be, into a clean, simply furnished room with attractive walls and curtains. A shower bath is handy and he steps in for a refreshing dash; after a hot water shave and a slick and a promise, he enjoys a well cooked breakfast down stairs.

Warm and well fed, he goes with contentment to his work in the Yard, without having to light the fires, or wait around to take the trolley or the jitney or the boat, or without even having to go out of doors.

At noon a hot meal, figured out for his particular likes and needs, awaits him without going out of the Yard, unless he prefers. After lunch he may go to his room and rest if he likes. Of course, the lunch cafeteria will accommodate many more than those having rooms in the hotel. Men who do not want to carry lunch will eat here also.

At night, after a faithful day's work in the Navy Service, he makes for his room and then the soap and hot and cold shower. Refreshed, he drops down stairs to a waiting dinner, well worthy of the day's work, served hot and clean from one of the best planned kitchens, and then for
The evening comfort, a paper and a smoke in the lounge, a game of cards or pool, and, if he wants, before going to bed, a shine or a shave in the barber shop for Sunday.

All this is warm animal comfort—not luxury—and ends to peace of mind and good Americanism.

**APARTMENT HOUSE**

The apartment house is "U" shape in plan, the court facing south and opening on the street. It contains about fifty apartments.

Each apartment has large windows arranged to provide cross ventilation, flue over kitchen stove; built-in kitchen bins and dish closets; breakfast table, built-in bath tub, sanitary and waterproof floors, hard wainscoat and washable walls in kitchen and bath room; varnished floors and wall beds in all other rooms, ice box and cold air cooler, roller shades and curtain rods. First floor is fireproof and other floors and partitions between apartments have heavy laminated sound deadening and semi-fireproof construction; stairways are strictly fireproof and not more than three apartments open on a single hall. A large individual storeroom in basement is supplied for each apartment. The basements are fireproof, with ample daylight and ventilation, windows and waterproof construction. Three separate laundries, each with two sets of tubs, electric washing machine and drying rooms. Heating plant is oil burning, minimizing dust and ashes. The court and grounds have landscape gardening, and the entire building represents modern construction. Service includes steam and hot water, but electric current is extra by meter, for cooking and lighting.

The apartment house contains two, three and four-room apartments, which are served by six fireproof tower stairways. The living rooms and bedrooms are provided with disappearing beds. The kitchens are equipped with electric ranges, sinks, cooling closets, the usual cupboards and bins; dumb waiters connecting with the basement. In the basement are located trunk storage rooms, laundry and drying rooms for the use of the tenants, and the mechanical plant.

**SCHOOL HOUSES**

Two new school buildings were erected, one having eight class rooms and a large auditorium and the other six class rooms and an auditorium.

The plan of the buildings is new in type, in that each (Continued on page 114)
A Villa in the Piedmont Hills

By Will G. Corlett

This original and picturesque house is usually glimpsed first from a distance, and generally from above, as the traveled roadways and avenues nearby and the approach to the house are above it. The house is placed among the oak trees on the sloping side of a canyon just enough up the side of the canyon to command the view in all directions—the long way of the house paralleling the general contours. The setting, outlook and scenery are lovely.

These splendid natural surroundings and favoring circumstances have given the designer a great advantage—and imposed a great obligation. A failure to take full advantage of such features would indeed be a pity.

This first glimpse from a distance discloses a simple, colorful bold structure of harmoniously irregular stucco walls and tile roof surfaces—lines and slopes and detail suggestive of the irregular skylines and unpretentious charm of southern European villages. There is a tallness to the house which lifts the house out of the closeness of the natural growth and planting and gives it a proper command of the surroundings. It also gives the necessary predominance of wall surface, yet nowhere is there any lack of window openings in the interior.

As one comes down the driveway lane from the public road a fitness for and harmony with the site and surroundings is evident at once. An impression is created that this house and garden have been here a long time. It seems almost that the trees and slopes have been placed to suit the house. Even with the command of the landscape which the house has there is an admirable seclusion and privacy guarded by nature for all time.

This admirable placing was accomplished with no destruction of trees and comparatively little grading. The grading that was done involved simply the moving of some earth to give the level entrance court and provide for the connection of the new driveway to the old trail in the canyon. Incidentally this grading permitted a wall and garden treatment on three sides of the level entrance court yard, adding to the privacy and charm of the setting, cutting off the public road and giving a pleasing prospect from the house entrance and open porch above it.

This outstanding characteristic of harmony with the site and surroundings produced by first impressions is borne out as a closer acquaintance is made. A surface treatment of the stucco consisting of a reasonable variation and trowel marking of the surface combined with color produces an effect and texture reminiscent of the variety and interest of old work. The entire absence of harshness and glaring artificiality so common in latter-day stucco work is decidedly noticeable.

Closer acquaintance and observation show the excellent orientation of the house. A maximum of sunlight is obtained in the portions where this is desirable at the time of day when the sunlight is wanted. The jogging of the plan on the southwest side gives the living room, dining room, terrace and screen porch on the first floor and the three major bedrooms on the second floor southwest corner exposures for sunlight, ventilation and view.

The plan, architectural treatment, furniture and hangings stamp the house unequivocally a house primarily for living and for restful, quiet, unostentatious comfortable living. The individuality of each room is maintained. One does not find an opening up of the entire first floor of the house—a rather common American mistake in both large and small houses, the purpose of which seems to be to make a house suitable for "entertaining," the result of which is vulgarity accompanied by an inevitable lack of comfort and usableness.

The arrangement of rooms and circulation connections of stairways and halls is admirable. The needs of the owner's family are provided for to a nicety. The comfort of visitors and guests is equally well provided for and hospitably thought out. The kitchen, service arrangements and servants' rooms again show no lack of thought and care.

The house is entered through an arcaded portico and through an impressive doorway of beautifully studied detail. The first story is quite high. In the entrance hall this height is relieved by arched embrasures and vaulted ceiling—just enough of vaulting to be effective and satisfying. From this hall the living room on one side and the library on the other open directly. Immediately opposite as one enters the entrance doorway is the stair hall. The living room is a fine large room with a height quite commensurate with the plan dimensions of the room. Too often such rooms are proportioned in plan only. The library is an exceptionally successful room splendidly placed architecturally, quiet and restful, yet having an outlook in three directions.

A feature worthy of comment is the development of a
critics to see what he would do with his own house in the way of furnishings and decorations. It would be only human to overdo and overfurnish one's own house in such a situation—yet perhaps the outstanding feature of the whole treatment is restraint. There is just a comfortable sufficiency of furnishings and no suggestion of extravagance, a restful quietness of color, in rugs and hangings, and an absolute absence of any resort to device or trickery for effect.

The lighting fixtures are extremely interesting, being well designed wrought fixtures, and use is made throughout of direct lighting. There is no denying the architectural excellence of simple direct lighting in a home, especially when the lights are broken up in small, well-shaped units as in this case. Use is also made of transparent Philippine shells with light metal frames in a very perfect way.

Such a successful combination of landscaping, architecture and furnishing might excuse a lack of some of the little details and practical conveniences. However, it seems worthy of comment that there is no lack in this respect and everywhere one sees ingenious conveniences handled always in a decorative way. Such bugbears as screens, mirrors, kitchen fittings, garage, service entry, etc., are all handled successfully and absolutely practically.

In seeing houses of this character one wishes that they could be used educationally to develop popular taste and that more people could see them. There is so much that can be done with thought and care at no greater expense than careless, thoughtless work, often at less expense.

small open court yard with fountain in the northeast corner of the plan. This little court is wonderfully secluded and private and has just the windows one would care to have looking out upon it. The library is given an outlook through a window on one of its axes directly onto this little court with fountain and a splendid oak tree beyond in the same axis. On the other side of the court the breakfast room, facing to the east, looks onto this court and fountain. With unselfish consideration for the guests of the household the guest suite is given a place on this little court. While these guest rooms are above the breakfast room the breakfast room is low and gives the guest room a very intimate relation to the court.

This guest room arrangement is very hospitable and comfortable—an arrangement anticipating every need and desire of a guest. The rooms are entered off the stair landing part way up to the family bedroom floor with all conveniences included. Access to the front hall, library, living room, etc., is direct and close and there is a privacy and freedom from interference with family arrangements that is ideal, all of which adds to the ease and comfort of the guest.

Mr. Atkins, who by profession tells others what to do with their houses, must expect a certain amount of curiosity or interest at least on the part of his visitors and
DOORWAY TO WALLED GARDEN, RESIDENCE OF J. H. ATKINS, PIEDMONT, CAL.

GUEST ROOM, RESIDENCE OF J. H. ATKINS

CORNER BEDROOM, RESIDENCE OF J. H. ATKINS
THE GARDEN

We do not know very much about lawns in California, the difficulty of keeping grass alive and thrifty during the long dry season, and the care needed through successive years to produce thick, deep-rooted turf, free from reign growth, have prevented most of us from real success.

But now that irrigation has become easy and automatic, with the various systems of perforated pipes or distributed sprinklers, the chief obstacle has been overcome. We are beginning to see beautiful, smooth, velvety spaces now, which show the results of patient and understanding effort. Lawns do not grow in a day. And while it may be easy to breathe such a thought in the country of flowers ever-the-less a broad green expanse of lawn does give the refreshing effect of an oasis in a desert.

Lawns should not be patchy; but a combination of level and slope, or if different levels connected by flights of steps, can be very pleasing. To accent this treatment by judicious use of trees and shrubs may well produce an effect of "Multum in Parvo", besides giving seclusion and privacy to desired spots or corners.

The terrace system is being experimented with all over California, and very successfully in many instances. A certain amount of lawn is always advisable if possible. Continuance of flowers and shrubs, however lovely in themselves, becomes restless in mass. After all, there is nothing that can take the place of a lawn in securing the atmosphere of restfulness and space that a garden must have to be really satisfactory. And a good lawn can do this even in an astonishingly small area.
shingles that at best can endure but twenty years. At the same time, the future prosperity of this district depends upon an influx of population carrying with it the building of many new homes, but must these homes be built at the expense of the trees along the highway?

I do not think so, as witness the few charming examples that already exist where the trees have not been sacrificed. However, let us look at the darker side of the problem and ask ourselves seriously what is the best thing to do. What could be the remedy? If existing conditions are detrimental to trees along the highway, why not adopt a policy for the future?

The State and the Nation propose vast highway construction projects. Would it not be wise that restrictions be fixed that buildings should not be constructed close than 75 feet there to? Such a restriction would preserve trees where they exist and encourage the planting of trees where none exist.

The restricted residence district has in nearly all cities...
TAHOE FISH HATCHERY
LAKE TAHOE, CAL.
Geo. B. McDougall, California State Architect

This building, containing 64 troughs for the propagation of fish, was completed in 1920 by the Bureau of Architecture of the State Department of Engineering for the California State Fish and Game Commission, and is situated on the edge of Lake Tahoe about one mile north of Tahoe City, facing the State Highway. The exterior walls are partly constructed of stone secured on the site, and the balance is of frame covered with bark stripped from the trees from that locality.

NOTED ARCHITECT PASSES AWAY

Henry Lord Gay, noted architect and sculptor, died June 10th at the home of his sister, Mrs. John Johnson, at Oceanside. He was 67 years of age, and had been a resident of San Diego for the last twelve years. Two years ago he suffered a stroke of paralysis and was unable to continue professional work.

Mr. Gay was a native of Baltimore. He took up the study of architecture at New Haven and later went to Italy to pursue his studies, winning a royal medal for his monument of Victor Emanuel, which was later brought to the United States and presented to the University of Illinois.

He practiced architecture in Chicago for many years and also published the "Building Budget," an architectural paper, in that city. He became a member of the Western Association of Architects in 1874, and a Fellow of the American Institute of Architects in 1887. He was also a member of the order of Knights Templar.
PUGET SOUND NAVY YARD

MAIN ENTRANCE NAVY YARD HOTEL

A. H. ALBERTSON, ARCHITECT
Plate 70

ENTRANCE TO SOUTH COURT APARTMENTS

PUGET SOUND NAVY YARD

A. H. ALBERTSON, ARCHITECT

THE BUILDING REVIEW

Vol. XIX. No.
RESIDENCE OF MR. J. H. ATKINS, FROM THE WEST BRIDGE
PIEDMONT, CALIFORNIA

DESIGNED BY MR. ATKINS
RESIDENCE OF MR. J. H. ATKINS, FROM INDIAN GULCH
PIEDMONT, CALIFORNIA
DESIGNED BY MR. ATKINS
FROM THE GULCH, AT THE WEST

THE FLAGGED FORECOURT
RESIDENCE OF MR. J. H. ATKINS, PIEDMONT, CALIFORNIA
THE LIVING ROOM FIREPLACE
RESIDENCE OF MR. I. H. ATKINS, PIEDMONT, CALIFORNIA
THE LIVING ROOM TOWARD THE FIREPLACE

THE LIVING ROOM TOWARD THE SOUTH WINDOW
RESIDENCE OF MR. J. H. ATKINS, PIEDMONT, CALIFORNIA
THROUGH THE BREAKFAST ROOM WINDOW
RESIDENCE OF MR. J. H. ATKINS, PIEDMONT, CALIFORNIA
DESIGNED BY MR. ATKINS
Though the charm of antique furniture is not to be unsaid, replicas of fine old pieces have a claim that cannot be denied. Regarding antiques, there must often be some doubt of their exact origin, and their condition usually leaves much to be desired, whereas the replica is exactly what it claims to be, not an imitation—that is, something intended to be mistaken for the real—but an exact reproduction. Of course, we do not refer to quantity production, which naturally cannot have any of the light feeling of craftsmanship.

But made in the same way as the original, following the same method of procedure in order to get the same result, using only more modern tools, and then adding the effect of age, a piece is produced that has all the fine qualities that have made the great furniture periods famous, with the additional value of strength and durability from its modern manufacture.

The furniture of the Italian Renaissance has all the virility, elegance and grace that marked the life of that age the art that was its expression.

Notwithstanding great richness of design, the fine effect of spaciousness and simplicity was achieved in all Italian interiors by the scale and generous proportions of the few pieces assembled. To use less furniture, and better, is a good rule in planning or remodelling any room.
A fine grouping of original Italian and French antiques with modern reproductions, in a room with consistent treatment of floor, wall and ceiling.

Two photographs illustrate a copy of a sixteenth century bed from the Davanzati collection, made here from authentic details, of specially selected and prepared walnut, with dull gilding and polychrome; the cover is of Italian damask of a dull red with under-tones of gray and yellow. The cassonetta and mirror are suitable in scale and detail.

The chimney-piece is a fine copy in Carrara marble of one in the Doge's Palace, while the accessories, iron and bronze fire-irons and candlesticks, the door (also of iron and bronze) and the brazier are all interesting antiques which, with the pottery, give character and atmosphere to the group.

Another photograph shows an antique fifteenth century stone chimney-piece brought from Tuscany, with old fire-irons from the collection of Gabriel d'Annunzio. The chair, covered with needlework, and the carved black walnut Renaissance coffer are also antiques. The reading desk, cabinet, and other accessories are replicas of rare old types, excellent examples of local handicraft.

Still another group combines a sixteenth century credenza, boldly but richly carved in walnut, with an unusually fine Aubusson tapestry of the seventeenth century, whose broad border of cartouches and flowers gives it a distinctive character. The accompanying furniture again consists of modern models of fine old pieces.

These local productions must be seen, in order to appreciate how excellent the handiwork is, and how remarkably the mellow tones of age have been reproduced. And another surprising fact is the low cost, which in many cases is much below that of modern machine-made furniture of hybrid design.

This is a home industry which we are proud to promote and which contributes its share toward making San Francisco a center of manufacturing and art interest.
All of these furniture pieces are hand-made in America.

An old marble mantel-piece at home in modern surroundings.

U. S. HOUSING CORPORATION
(Continued from page 103)

class room is lighted mainly through double skylights aside from the small amount of light admitted through a few side windows. The skylights give a soft mellow light, evenly distributed over every part of the room in a manner that cannot be accomplished by side windows. By this method of lighting, shadows as well as glare is eliminated and the quantity of light is more nearly uniform through bright and dark days than is the case with the light coming through windows. The eye strain from cross light is removed, tending to a greater degree of contentment and a better attitude of mind on the part of the pupils.

This type of building was first used by the Government at Quincy, Mass., and the buildings are the first of the new kind to be used here.

The buildings are but one story high and each class room has its own doorway to the out of doors, in addition to the main entrances. These side doors not only add to the safety in case of fire, but add a sense of privacy and homeliness and give individuality to each room by allowing it to control its own movements. Another feature that was incorporated to fit the schools to the climate is the covered play space planned as a part of the buildings, one space for girls and one for boys.

The school authorities state that they like the new type of building and strongly recommend the results obtained.

HOUSES

The experience of the United States Housing Corporation in connection with small houses is and will be of economic value. One of the good results of the housing work done during the war is shown by this project. There are about 250 houses placed throughout the residential sections of Bremerton, sometimes in ones and twos, in groups and in whole blocks, and their presence speaks a new word for home-making and for civic pride. They tell of simplicity and charm in a small house and of sunshine and happiness in domesticity.

As the houses are built for the men who work in the Navy Yard, they are of necessity small, from three to five rooms, the men occupying them being shipyard mechanics who work for an average wage of $6.00 per day. The old method was to build rows of houses upon one plan, crowded together, where a man could distinguish his own house only by the number over the door. These houses are different—everywhere there is space, room to let in the sunshine, individuality and cheerfulness. The houses do not stand with their toes on one line, but in social groups, having regard for each other. They are not all of one type, but pleasingly alike and at the same time different.

The colors were selected for cheerfulness. the stains being of pale warm gray, of light coffee color, and of natural lavender. Most of the houses are bungalows, but with a good addition of story and a half houses for those who prefer an upstairs. All of the houses have very small eaves, with plenty of windows to let in all the sunshine. The yards have all been graded, grassed and planted in shrubs.

The inside arrangement is as interesting as the outside promise—coziness, comfort, convenience. It is easy for the housewife to do her work here. There is always a generous living room, sometimes a dining room, but more often the smaller and more convenient “breakfast alcove.” Every room and hall in every house has a closet; every bedroom has cross ventilation; every house has a bathroom and kitchen having cooling closet, broom closet, bins, shelves, drawers and screen doors. Half the houses have fireplaces and basements with furnaces. The smallest house has but three rooms—living room, kitchen, bedroom and bath—but it is made elastic by a wall bed in the living room; another type has a “sleeping porch” closed in with casement windows, making an attractive room that might be a sewing room or children’s play room.

The different types seem to pronounce their individuality. One of the houses is known by the workmen as the “Chapel House” on account of the arched doorway leading to the front porch; another is called the “Romeo and Juliet House” on account of the little balcony over the front porch.

Now the war is over, the hotel has been transferred to the Navy Department for its permanent uses. The apartment house has been sold to private parties. The school houses have been turned over to the towns of Bremerton and Charleston to be paid for on long term arrangements. The houses were all very quickly sold, mostly to their war occupants, as soon as they were put on the market.

HYDRO-ELECTRIC DEVELOPMENT IN CALIFORNIA

By W. E. Creed
President Pacific Gas and Electric Company

There is no State in the Union which is so liberally supplied with raw materials as the State of California. It has a base population which is essential to industrial development on a large scale. It has the basic materials to be found in mines and minerals, horticulture, forest products, fisheries and so on. This combination of population and raw materials means enormous industrial development provided one other thing exists, and that one other thing is power. That power cannot come from coal or oil or wood, and fortunately the State has the physical conditions and the physical resources for the development of water power, the best and cheapest source of power in the world.

As an index of what the situation in California is, let me point out what happened between 1909 and 1914. The value of manufactured products in the whole United States, exclusive of California, increased 17 per cent. In California during the same period and before war conditions arose, the value of manufactured products increased 34.6 per cent. As to the value added by manufactured, that is, the difference between the value of raw materials and the product manufactured, the ratio of increase for the entire country was 15.8 per cent, and for California 30 per cent. I have endeavored to secure a census of manufactures for the whole state as collected in the last census, but have been only able to secure the report for the city of Los Angeles, which I am led to believe
HOTEL BUILDING, PUGET SOUND NAVY YARD

BASEMENT PLAN OF HOTEL

TYPICAL FLOOR PLAN OF HOTEL

HOUSE No. 202, PUGET SOUND NAVY YARD

A. H. ALBERTSON, ARCHITECT

HOUSE No. 200, PUGET SOUND NAVY YARD
saving in building construction through the elimination of chimneys, etc., is no doubt responsible for our finding this subject of Majestic Heat being mentioned almost wherever architects gather. Little ventilation is needed with this pure-air heat, for no impurities are discharged into the air of the room, however, as the heat rays are not affected by the opening of a window.

In an interview with Mr. H. V. Mooney, who has just purchased the new Merritt-Grand Apartments, Grand Avenue, Oakland,—three and four room apartments of high grade—he explains that each apartment is equipped with 1400 watt Majestic Heaters in the living rooms and vestibules and 900 watt heaters in the dining rooms. They are built in the walls and surrounded by artistic frames, and hundreds of people who have inspected them are so pleased with their appearance and ornamentation to the room that they leave with a desire for the same installation in their homes. The heaters are wired to one meter and the current furnished without charge to the tenants. Recent modifications of the heating rates permit such arrangement, and the cost to the owners is small and far below the cost of steam heat. Mr. Mooney is of the opinion that once a person has enjoyed electric heat he is never satisfied with any other kind.

Owing to the publicity that has been given this particular building, it has been inspected by a great number of people who contemplate building apartment houses, and it is reported that a number of them have specified the same electrical equipment as that installed in the Merritt-Grand.

Within the past few months this type of heat has been installed, in addition to apartment houses, in the highest type of residences, hotels, schools, churches, lodge halls and summer resorts and in almost every other type of building, and no argument from prejudiced parties should be permitted to stand in the way of an exhaustive consideration of it on new projects of any kind.

Five years from now electrically heated buildings will still be heated in a modern way, while buildings heated other than by electricity will be out of date, and the income from them greatly reduced.

The accompanying photographs show the heaters in the Merritt-Grand Apartment House.
HYDRO ELECTRIC DEVELOPMENT IN CALIFORNIA
(Continued from page 114)

ill be fairly indicative of the conditions all over the state. This port shows that in the period from 1914 to 1919, the value of manufactured products in the city of Los Angeles increased 170 per cent, and that the value added by manufacture, which is the created value due to manufacture, increased in those years 168 per cent.

The State of California is thus seen to be on the road to an enormous industrial development. It has the opportunity, provided power is furnished, to show in the next ten years even greater increases than are shown by the past decade. And that increase will be, provided we have power, to our increased population and industrial development itself should in turn increase our population. Roughly, I think it is reasonable to say at California is going to need as a whole 100,000 horsepower additional per annum on the assumption that power does not take the place of oil in any respect and that there are no new uses for power. To the extent to which water power takes the place of oil, and to the extent there are new uses of power, such as electrification of trains and other developments, the amount of power needed by the state will be considerably in excess of the 100,000 H. P. per annum which I have mentioned. With that need of the state is the need of its agencies for money to anticipate and in due time meet the demands for that power.

Power development is needed in California because of the range in the economic character of the State which has been wider since about 1904. The original State of California had very small population, that is, the population increased at a comparatively slow rate, and the population was built upon the utilization of its natural resources which could be used without any great industrial structure. The great drawback to any industrial development in California was the lack of cheap fuel. California never had any good coal supply. It has coal supplies of inferior quality, it no good coal supplies. But the discovery of oil and the development of oil supplies, which reached a substantial development along between 1902 and 1903, brought about a considerable change in the character of the State.

The United States census of manufacturers for 1914 pointed out is very clearly. The census report said that the natural resources of the State give rise to several of its leading industries, such as mining and preserving, petroleum and refining, lumber, beet sugar, and so forth; that while the cost of oil, most of which had to be brought from outside the State, retarded manufacturers, the discovery of an abundance of oil in the State accelerated manufacturers. The discovery of oil was one of the great factors contributing to the increase in population in the State during the last few years, so that the present situation is just this: that the oil supply, aided by our water power development, has accelerated the industrial growth of the State and has given a base population on which greater industrial development will come.

But, unfortunately or fortunately, perhaps, the oil industry in ringing about this industrial development assumed burdens beyond its capacity to carry in the future. There are uses for oil which there are no substitutes, and the extent to which California and the West Coast have used oil to develop power is truly astounding. That burden can no longer rest upon the oil industry unless other necessary activities are to cease.

The question before the State of California today is whether its development can be made. I don’t think it is as a question of whether it is going to cost 5, 10, or 20 per cent more, or less. What matter is too important to justify any quarreling, any haggling or debating on whether the cost is a few cents one way or the other. Can this thing be done? It is perfectly obvious that it ought to be done, and if it can be done California will become one of the greatest empires in the world. If the people are not willing to pay for development now, if they are not willing to support development program and be liberal toward it, they are not going to get it; and if they do get it in the future they will pay more for it. The taxable wealth of this State will increase, the prosperity of the whole State will increase, if the people of the State adopt a liberal attitude and put their money in the position to get money to meet the competition that they must meet in getting money to carry on the development.

The destiny of California is to win a world championship contest, to build up world championship cities on this coast. We have only our great back country, but the whole of the Pacific area to deal with and to trade with. It is perfectly clear to me that if we do not meet the situation now we will pay more for development later, and failure now will cost the whole state, agriculturists, merchants and all classes of our people, huge sums of money in lost opportunity.

The controlling factors fixing rates are economic conditions. Rates cannot be arbitrary. The Commission cannot fix rates. In the last analysis, rates are fixed by capital, or put it another way, they are fixed by economic conditions. Prices of labor, prices of material and the prices of money are the most important factors in fixing rates. These rates do not depend upon the whim and caprice of companies or upon the whim or caprice of commissions. They are fixed by certain very definite factors which I sum up by naming them economic factors. There is only one variable factor in the fixing of rates and that is the quantity of efficient management. With a high degree of efficiency lower rates can be fixed than with a low degree of efficiency.

There are just two points that need to be emphasized in considering the program for future development. First, that what the companies must have in order to do this job for the public is the revenue to pay their bills, to inspire the investor, persuade the investor to come into the enterprises. I am not making any plea to increase the rate of interest for any existing bondholder at all. His rate of interest is fixed in the bonds, and the rate is fixed for the preferred stock. I am not making a plea to get more money or any increased profit for these securities. What I am seeking, in order that my associates and I may do the thing we know needs to be done, what I am doing is asking the revenue necessary to get more bondholders and more stockholders and more capital to carry on this work. We want the revenue which will make the thing which ought to be done.

And the second thing I want to emphasize is that the people of this State will profit in two ways: In improved quality of service without increased cost, and in adequate quantity of service; provided, we can secure the goodwill and co-operation of the public in the momentous tasks which confront the whole public service industry. I put into that industry not only the power and gas companies, but the transportation companies, as well. Public support, public co-operation, public goodwill, in respect of the public service industry will be the best investment the public can make.

CARDINAL POINTS OF STUCCO DESIGN

(1) Stucco should not be run down to the ground without a solid impervious base course.

(2) The proper overhang and drip should be provided for all window sills and other horizontal woodwork, and some stop should be provided at the ends to avoid the concentration of water over end of the sill.

(3) The design should be chosen permitting a generous overhang of eaves and cornices.

(4) There should be a continuous horizontal surface of stucco on which water can collect. Liberal and intelligent use of flashings should be made wherever water might get behind stucco—such as roof and wall intersections, underjoints of masonry trim, etc.

(5) Some impervious chimney cap should be provided avoiding unprotected stucco at top of chimney. Chimneys should be surrounded by metal lath before stuccoing. Sheathing should be eliminated and metal lath back-plastered according to the findings of the U. S. Bureau of Standards.
THE BUILDING REVIEW

EDITORIAL

THE BUILDING CONTROVERSY

It is hard for the public, and for the architectural profession, which stands between the public and the building industry, to understand why the building controversy in the San Francisco Bay region has not been settled. The issue at stake is comparatively small as regards money. As called for by the Board of Arbitration, seven and a half per cent is a very moderate reduction in wages compared to general reductions in cost of most other commodities beside labor. And the unions must be short-sighted indeed if they cannot see that a small reduction in wages will start a vast amount of much-needed building, since the public demands such an indication of good faith and cooperation. By general and continued employment, labor will profit thereby far more than by the limited and spasmodic employment at high wages, which has been the case during late years. Since the policy of unionism has been to get results for the mass, for the average workman, the present attitude would seem inconsistent without an explanation to the contrary, which has not been forthcoming.

And as regards the principle for which the Builders Exchange contends, namely, that a written agreement must be lived up to, there is no question in the public mind. The man who repudiates his word cannot expect that he will receive either respect or sympathy. If a decision is against him, and he accepts it without complaining and goes to work, he will receive both respect and sympathy. A quitter is backed up by neither God nor man.

No one blames the unions for making every effort to protect and advance their members every effort, that is which does not disregard the laws, written and unwritten, by which society protects its common interests. Class selfishness, class domination, is just as objectionable to society as a whole, whether it be that of the church, of the farm, of the bank, or the factory. Society as a whole will no longer stand for domination by any one class. But society welcomes and encourages the efforts of any group or individual to add to the common welfare.

Let us hope that the general public attitude, becoming more and more evident, will have its influence in the early settlement of the building controversy.
ARCHITECTURAL DIRECTORY

For the benefit of readers and advertisers we will publish each month a portion of the revised list of Architects, Designers and architectural Engineers of the Western States.

(For information concerning copies of the complete list write "The Building Review").

in Luis Obispo
J. C. Simms, 793 Higuera Street.

in Pedro
G. F. Cortesiou, W. P. Durr.

in Rafael
C. W. Kenitzer, 12 Ross Street.

in Santa Ana
Arthur C. C. Kearney, Spurgeon Building.
Frederick H. Eley, 130 West Eighteenth Street.
William W. Kays, Trust and Savings Bank Building.
F. W. Opp, 1739 Valencia Street.

in Santa Barbara
J. L. Curletti, 1715 Garden Street.
Floyd E. Brewster, 907 Chapula Street.
J. Corbley Poole, Inc., Bothin Building.
Roland L. Sauter, San Marchia Building.
Winston Soul, 1206 State Street.
Eugene Seller, 409 San Marcus Building.
Francis W. Wilson, 717½ State Street.
D. V. Denel, 1203 Moro Villa Avenue.
J. F. Murphy, 1206 State Street.

in Santa Cruz
Collins & Byrne, Theater Building.
E. L. Van Cloek, Santa Cruz Bank Building.

in Santa Rosa
W. Herbert, 414 Bank of Italy Building.

in Terra Madre
John F. Dupre, Sturtevant Trail.

in Sonoma
G. E. Teets.

in Stockton
Glenn Allen, 38 Georges Co. Building.
E. B. Brown, 134 North El Dorado Street.
Davis-Heller-Pearce Co., Belding Building.
Losekann & Cloudsdale, 308 Elks Building.
Frank V. Mayo, 207 Yosemite Building.
Ralph P. Morrell, 1, O. O., F. Building, 210 E. Main Street.
Franklyn E. Warner, 401 Belding Building.
Wright & Saterle, Bank of Italy Building.
Chas. H. Young, 903 Commercial and Savings Bank Building.
P. L. Sola, 208 Wilhoits Street.

in San Francisco
R. D. Taylor.
T. W. Hamilton.

in Vallejo
J. R. Henderson.

in Napa
Max E. Cook.

in Mendocino
E. T. Greenleaf.

in Vallejo
C. E. Perry, Jr., 514 Marin Street.
George Cassidy, 736 Georgia Street.

in Salinas
Morse L. Weaver, North Locust Street.
N. E. Michels.

in Alhambra
J. S. White.

in Watsonville
Ralph Wyckoff, Pajaro Valley National Bank Building.

in Monterey
Otto A. Deichmann, Barceloux Building.
Minutes of the 269th Regular Meeting held in Spokane, May 4, 1921, Hotel Davenport, 12:15.


Mr. Whitehouse introduced Mr. Alden who took the chair.

Minutes of the previous meeting were read and approved.

Secretary read a letter from the Tacoma group inviting the Chapter to hold its June meeting at American Lake near Tacoma.

Mr. Sexsmith, reporting for the committee on farm buildings, stated that 288 letters had been in receipt of the Tacoma group concerning the Farm Home Competition which is being conducted by his department and the department of Home Economics at Fullman. Among many interesting items, he mentioned that the best by-products of the competition was the inauguration of co-operative work with the Washington State Chapter of the American Institute of Architects.

He stated that from his experience in a competition, his committee on Farm Buildings had learned to approach the farm house problem from the kitchen for the reason that the life of the farm house is largely affected by the efficiency of the kitchen arrangements. He found that the correspondence from farmers’ wives was very instructive in showing him that the real problems on which his committee was tabulating was received from this source.

Mr. Weaver insisted that the architect must get the farmers point of view before he can even hope to approach the farm house problem. The Chapter, he found, has received a lot of excellent advertising at no cost to itself through the medium of the Farm Bureau Competition.

The Committee expects to pass on to the Small House Service Bureau these plans for its use.

Mr. Sexsmith spoke on the work of the Education Committee in his endeavor to assist in the improving of the architectural courses being given in the Seattle High schools. As a result of this talk Mr. Keith moved, and Mr. Price seconded, that a similar committee on education be appointed within the Spokane group, the chairman to be a member of the Chapter Committee on Education.

Carried.

Mr. Price then spoke on the conditions in Spokane relative to the establishment of a branch of the Small House Service Bureau in that city. All of the Spokane men are enthusiastic in regard to the Bureau and believe that the time is now ripe for the establishment of that service in the Spokane district.

Mr. Keith spoke on the feasibility of having the Chapter exhibit shown in Spokane. In this connection he made the suggestion that Oregon and California might be invited to come in on such an exhibition.

Carried.

Mr. Weaver moved, Mr. Westcott seconded, that the Chapter bulletin be sent to all newspapers of the State. Carried.

Mr. Noel Thompson was appointed Secretary for the Spokane group.

The Spokane meeting was held to meet the President and Secretary of the Chapter on their way through the 54th Convention of the Institute. The meeting was a very live and interesting one and the President and Secretary left them with the impression that they are a loyal and enthusiastic group of members of the Institute.

Minutes of the 270th regular meeting of the Chapter, June 11th, at the Red Shield Inn, Camp Lewis, American Lake.

Twenty Seattle men and seventeen Tacoma men were present.

Minutes of the previous meeting were read and approved.

The President called upon Mr. Albertson to report to the Small House Service Bureau. Mr. Albertson outlined the history of the establishment of the Minnesota Bureau and gave a brief explanation of the method of producing the small house plans which were completed by them under contract with the Southern Pine Association. After some discussion the committee report was adopted.

Carried.

Mr. L. B. Borek, seconded by Mr. Svarz, that the work of establishing the Small House Service Bureau for the Pacific Northwest be conducted by the present committee with power to enlarge its function as may be desired by Mr. Borek, seconded by Mr. Field, that Mr. Shaw of Tacoma be appointed the Tacoma group correspondent for the Bulletin.

Regarding for the Committee on Special Finances, Mr. Cote, the chairman, read Mr. Albertson’s letter withdrawing the suggestion that dues be reduced from $20 to $15 as per his original proposal. Mr. Albertson in the same letter suggested further that out-of-town members be exempt from payment from the proposed $1 on every $10,000 of work. Mr. Gove objected to this and the suggestion was disapproved of by the members of the Chapter.

Mr. Albertson then moved, seconded by Mr. Svarz, that the committee work, and Mr. Sexsmith moved, and Mr. Svarz seconded, that Mr. Cote’s committee send out a letter ballot asking the membership to express its opinion on the by-laws of the chapter. A letter ballot was ordered with reference to Mr. Albertson’s proposal. Mr. Albertson asked that the ballot include the information that it is the sense of the meeting that the Chapter approves the original proposal of Mr. Albertson unanimously.

The meeting this year was particularly enjoyable in that the entire group from Seattle made the trip to American Lake in machines and visited two houses designed by Mr. Kutter of Spokane, namely, the Carmen house and the Wm. Jones house. A friendly spirit was manifest throughout and the meeting was voted as one of the most enjoyable of the June meetings the Chapter has held with the Tacoma group.

H. O. SEXSMITH, Secretary.

SAN FRANCISCO CHAPTER

A special meeting of the Board of Directors of the San Francisco Chapter of the American Institute of Architects was held on Thursday, June 23, 1921, at 12:15 at St. Germain Restaurant. The meeting was called to order by the President, Mr. Svarz, at 12:15. The following was taken as approved in the following manner.

Resolved, That this Chapter as an expression of its approval offers its fullest assistance and co-operation toward the consummation of these public improvements to the end that before any project is finally launched the fullest consideration can be given to the aesthetic requirements of design and environment so that the artistic reputation established for the city of San Francisco by the Pacific-Pacific Exposition shall be properly safeguarded.

Whereas, The Memorial Building to be erected on Van Ness Avenue, adjacent to the Civic Center, will probably be permanent in its plans for the memory of the “Heroic Dead” and will form an additional unit to the group already erected on the Center.

And Whereas, The funds for the erection of the edifice are largely raised by popular subscription. Therefore there should be an endeavor to receive and carefully consider as many thoughts and suggestive plans for the solution of this problem as possible.

And Whereas, The San Francisco Chapter of the American Institute of Architects is deeply interested in this problem, which is so intimately connected with the activities of the Chapter’s membership.

Therefore, be it Resolved, That the Board of Directors of the San Francisco Chapter express to the Trustees, or committee, of the Memorial Association the Chapter’s interest in the proper solution of this problem, and again extend the good office of the Chapter by any expression of the hope that the full significance of the problem is being considered by them, not only in the solution for the immediate building or buildings contemplated to be now erected, but in its larger aspect, the relation of the group to the future development of the Civic Center, and the future growth of the city. The Chapter’s Board being ignorant of the activities of the Memorial Committee, they respectfully beg to inquire what action, if any, the committee has taken with reference to the future development of the Civic Center, and the future growth of the city. The Board’s further study of the building under discussion is materially advanced. If no action has been taken by the committee, may the Board be advised as to what program the committee has in view in securing the fulfillment of the program.

Adjournment.

There being no further business the meeting adjourned at 1:30 p.m. Respectfully submitted,

(Signed) J. STEWART FAIRWEATHER,
Secretary.
MAJESTIC ELECTRIC DEVELOPMENT CO.
Manufacturers and Patentees
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We BUILDING REVIEW

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Business Manager—E. D. Mc Donald.

Cover—Terrace, Garden of Mr. Jas. Hoatson, Los Angeles.

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† The editors will be pleased to consider contributions of interest to the Industry. When payment for same is desired, this fact should be stated.
† News stands and dealers supplied through San Francisco News Co., San Francisco, Calif., or American News Co. New York, N.Y.
I shall never, in the years remaining,
Paint you pictures, no, nor carve you statues,
Make you music that should all-express me;
So it seems: I stand on my attainment.
This of verse alone, one life allows me:
Verse and nothing else have I to give you.
Browning "One Word More."

O, it seems to us regarding your work. Yet, should one call your buildings, your memorials of stone and earthly things--should this be called work?

We surmise your greatest joy arises from having your blue-prints grow into homes, be they modest or palatial, into commercial structures which become factors in the marts of trade, into public edifices that future generations may enjoy and admire.

This is Attainment.

Paints and Varnishes are valueless until properly used. They, too, have an attainment when they make the world a better place in which to live,—protecting and enrichening for those who come after us, the attainments of the architect of today.

Such is Our Creed.

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Burned Clay Roofing Tile

"THE EVERLASTING MATERIAL"

USE SPANISH TILE FOR ECONOMY

SPANISH TILE SPECIFICATIONS

Preparation of Roof by Contractor

The Contractor shall sheath and nail tightly, smooth off raised boards. fill properly or cover with metal all knot holes, then remove all refuse from surface of roof.

Install all Flashings as directed by Tile Setter, using metal 28 inches wide for Vallies and to be laid on top of the Paper Sheathing.

All wood strips shall be installed on Hips and Ridges using 1 inch by 4 inch and placing 1 inch cant strip at eaves.

Application of Paper

Use sufficient quantity of DRUMMOND ASBESTOS ROOFING. White Top, medium 35 lbs., laid black side to the weather, or DRUM- MOND ASBESTOS ROOFING, Black Top, medium, 40 lbs., beginning at eaves to cover entire roof surface, over all Vallies, Hips, and Ridges and under all Flashings, lapping each layer 3 inches, nailing same securely with flat head nails. Lay an additional full width paper strip up and down all Vallies.

APPLICATION OF CLAY TILE

Materials

Use Simons Brick Co.'s Large Spanish ("Extreme Variation," "Medium Variation," "Kiln Run," and "Solid Color", shade of) Burned Clay Roofing Tile to cover all pitched portion of Roofs using Simons Brick Co.'s Small Mission Tops, Hip Starters, and Finials (as designated by Architect) to be properly installed over all Hips and Ridges after Field Tile is applied.

All tile to be absolutely free from laminations and blisters as per the guarantee issued by the Simons Brick Company.

Method of Laying

The Tile Setter shall, in a workmanship like manner, beginning at cave course, lay all rows at right angle and parallel to each row, making no attempt to stretch the tile, nailing each tile securely with two 4d Galvanized Iron Nails. He shall cut the tile carefully at Hips and Ridges, filling the voids with elastic cement, thereby making it waterproof.

After all the Field Tile are laid then apply the Hip Starter, Hips, Ridges and Finials in place, point up all connections smoothly with Colored Cement conforming with the Tile Shades, afterwards carefully inspecting the roof and removing all broken and damaged Tile.

Note:—All laying of Tile shall be done only by expert Tile Setter.

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"Save the Surface and You Save All"
Some Southern California Houses

Designed by H. H. Whiteley, Architect

High up on the bluff at Long Beach, and facing the ocean, is a Spanish house designed for Mr. Gilbert Van Camp.

At first glance the eye is caught by the soft color tone of the plastered walls contrasting yet harmonizing with the velvet green lawn. Brick steps and a tiny brick terrace lead up to the front door. Of dark oak, set off by a carved hood of ivory tint, it is charming in its simplicity, and is the dominating note in the elevation.

Effective also is the broken line of red tile roof and the tile awning over the windows. There is no porch in front, so that nothing may obscure the magnificent ocean view from the windows of den, living and bedroom.

The house is built around a patio open to the sky, where, sheltered by the walls of house and garden, flowers grow in profusion and a lily pond reflects the blue above. Beyond an iron gate in the patio wall lies an open garden, where one may sit or walk beneath a rustic pergola, but which, of course, lacks shelter from ocean winds.

Apparently this house was designed for life in the open, for in addition to living room and den, there is, best of all, a large loggia opening from the living room and
looking out upon the patio. Three sides are plastered and adjoin the main part of the house, but the fourth is formed of three great arches. Here one may be virtually out of doors, yet the arches may be closed by swinging together the French doors. For raw, wintry days a fireplace has been provided and this furnishes all the heat necessary to make the porch a livable part of the home.

Built as they are in the form of a hollow square, all rooms are light and sunny, and are, besides, simply and artistically decorated and furnished. About the whole of the house there is a homelike atmosphere as there was in the old Spanish homes, as there is always where a patio or walled garden draws together the various parts of the home.

The house designed for H. M. Rubey is situated in the foothills in the northern section of Los Angeles.

One could scarcely imagine a more ideal spot for a home than the one on which this house is located. Standing upon a terraced elevation and backed by the hills, it commands a view of the city and surrounding country, which is almost unsurpassed. On clear days one may easily see the ocean from the porch.

The house is a creamy pink stucco with tile roof. A unique arrangement brings a sun room with curved front into the center of the
elevation. This portion has tiled roof and two entry ways with tiled hoods. On either side of the sun room is a flat roofed wing. Both entrances open from a rounded porch guarded by a wrought iron rail.

Two sunny bedrooms on the west look down over the valley. On the east are dining room and kitchen, and a breakfast room cleverly decorated and furnished in grey and orange. This little room juts out from the house so that one may better feel the warmth of the morning sun and watch the changing colors on the hillsides.

At the rear is, of course, a patio. As shown by the photograph it is typically old California Spanish. The wall surrounding it, the Indian pots, the banana trees, even the pool, all are reminiscent of the old days of Spanish dons.

Standing there at the foot of those sagebrush covered hills, with the sunshine upon its creamy walls, there is an atmosphere of old California about the house. It leaves one with the pleasant feeling that the beauty and traditions of those days are not being wholly lost, that they will always survive so long as there are men in California who understand and can ably interpret the spirit and atmosphere of those times.

The little house built for Mr. Seth W. P. Strelinger is a bungalow of the Spanish type.
It is located in beautiful Beverly Hills, where with trees for setting and with the ever changing hills for background it stands like a little gem and blends with the colorful landscape. It is blue in color, the blue of the clear California sky. Soft in tone is the tile roof, the variegated shades skillfully blended, the tiles laid in picturesquely uneven lines.

A tall garden wall which hides the doorway at once intrigues the interest. A peep through the iron bars of the gate gives a glimpse of tiny garden. Within a patch of lawn is broken by winding brick paths. There is a profusion of shrubbery; and at one end of the garden wall a fountain of vivid Moorish tiles half hidden by drooping plants drips into a tiny pool.

Further carrying out the color note struck by the Moorish tile, awnings of brilliant hued stripes shade the windows. The windows and doors, by the way, are particularly interesting, being set deep into the thick walls as we find them in old adobes. Before each window black iron grills lend character, and contrast strikingly with the blue of the walls.

A heavy oak door leads into a long living room, the spaciousness of which is further accentuated by the high barrel ceiling. Tall windows in front beautifully draped, dominate the room and serve to flood it with sunshine. French doors stand open to the patio, binding together house and garden as should be the case in all true homes—especially here in California, where the garden is so often paramount in our home life.

And here is a home doubly blessed, for at the rear of the living room French doors open upon another patio, also walled. This, of course, is less formal than the entrance garden and is, therefore, well adapted to its purpose of outdoor living room, where as in old California days, the principal work and play of the household is carried on.

A sunny kitchen with Pullman breakfast nook, and two large bed chambers, each with its complement of bath and dressing room, complete the little house.

The home in Windsor Square built for Robert O. Vredenburgh is rather of the Italian type than the Spanish.

The house is of sand colored plaster with tile roof. The rather plain front, which is typical of this style of house, is relieved by a well-balanced arrangement of window and door openings.

Within, the house is typical of the Italian type, simple, yet formal—a large living room of dignity with Batchelder tile fireplace and tall windows. The dining room is paneled in ivory against which the rich hangings and dark carved furniture shows to great advantage.

The breakfast room is, however, informal and sunny. There is a large bay window hung with gay curtains looking out into a flower garden, and white painted furniture brings the brightness of the garden into the room.
One of the largest building companies in Los Angeles had for many years built in a manner more or less regardless of style. Not that their houses were any worse than those of their competitors; in fact, they were the usual Swiss-chalet-bungalow and airplane-story and a half types. Since they sold, there seemed to be no reason why they should not be built until the judgment day. But there was a very good reason, which, although inaudible at first, made itself heard as mile after mile of bungalows were erected. People wearied of these monotonous rows of atrocities in their indigestible coats of bilious browns and greens. More, they began to say that they did not care to purchase such dejected, dyspeptic-looking houses.

The building company realized that it was up to them to change the style of their houses. They saw clearly that their former policy was a mistake; that although people will buy anything, no matter how ugly, for a certain time, the time will come when they will refuse to purchase; and they saw that the sins of the past would continue to hurt their reputation.

A new management had come in. Progressive, intelligent and cultured men now controlled the policy. At once they decided that their houses would not only be as good as the others, but better. In fact, they determined to make their houses standards for efficient plans and beautiful exteriors.

The houses shown in the accompanying illustrations are part of a group designed by Pierpont & Walter S. Davis, and are far removed from the conventional, commercial type.

The residence of Mr. Jos. Hoatson is a good type of the simple and dignified Italian villa so well suited to California. The arch motif of its central loggia is continued around the first story in all its openings; over each is a square, shuttered window with an iron flower-box balcony. But this symmetry is saved from baldness by the excellent proportions and lines of the mass, the broad walk surfaces, the Palladian Porch extensions, one of which carries a delicately colonaded upper story forming a sun room or sleeping porch.

The house stands on a broad flat paved
terrace, at the head of a splendid sweep of lawn which slopes down to the street, commanding an extended view in all directions. Italy itself could hardly provide a more perfect setting for one of its jewel villas, and every care has been taken to avoid any jarring note. The planting, with its tall cypresses and grouped shrubs, the accessory benches and urns, the fountain, the satyr hermes silhouetted against the crisp shadows cast by latticed arbor on white plastered wall—all blend in a harmonious picture.

Very different is the cottage of Mrs. Muchmore. With a strong English flavor, still it is a law unto itself. It rambles about as it pleases, with gables of odd sizes, jutting wings and recessed courts, for all the world like a story-book house; one almost expects to see a witch on a broomstick flying out of that checker-board chimney. The quaint modelling of cat and monkey and vines over the entrance carries on the illusion; the stepping stones through the grass, the row of mullioned, diamond-paned casements, the overhanging oaks—altogether it is a fascinating little place, and will be even more delightful when time has provided growth of vines and shrubs.

And still another type of house, set in another kind of scenery, is that of Mr. George Coaks, at Pebble Beach. This, too, is a picturesque, rambling affair; but it might be thousands of miles away, both in character and in environment. It is worth note, incidentally, that each of the three houses here shown is ideally suited to its location. The long, flat roof lines of the Coaks house are very effective as seen between the straight trunks of the pine trees, and looking up from down the hill, one gets the irregular outline sharply defined against the dark masses of foliage.

The house is Spanish in detail—grilles, shields, brackets, tiled roof, and so on—but there is more than a suggestion of the Mexican Indian in its mesa-like masses, its plain, square openings, its boss-studded doorway flanked with century plants. The rough texture of the stucco wall, and the deep reveals here and there are suggestive of our old adobe structures.

While the picturesqueness of the building is undeniable, it is quite evident that all these balconies and terraces and porches were designed, not just for decoration, but with an object.

Provision has been made for sunshine and shade, for view and for privacy. It gives every impression of being a livable home, although it would probably not suit a great
many people. But, fortunately for the world and for architects, tastes differ, and there is always a good solution for every house problem—for the man who really is an architect.

Every one of these houses has character, scale and "style." It will be interesting to watch the development of this new company.

STATEMENT OF BOARD OF DIRECTORS ALLIED ARCHITECTS’ ASSOCIATION OF LOS ANGELES

There was organized in Los Angeles in the first week of July, 1921, an association of professional men to provide the municipal, county, state and national government an opportunity of obtaining the highest expression of the art of architecture in public buildings and structures and at the least possible cost.

Thirty-three of the leading architects of Southern California have associated as members of the Allied Architects’ Association of Los Angeles, and have incorporated under the laws of the State of California as a cooperative association not for profit.

The plan, the idea, the ideal of this organization, simply expressed, is this:

Thirty-three architects believe that they can subordinate and submerge their individual interests, to the end, that they shall, collectively, as allies and co-workers, offer the civil authorities a method of securing the best of architecture in public structures at no greater cost to those authorities for their collective services than would be paid to an individual architect, and with the most complete assurance that the buildings would be built for the least possible cost to the public.

The idea is to give collective service: the ideal is to achieve thereby an adequate expression of the art of architecture in our public structures. The idea and the ideal are expressed in the by-laws of the association:

"The paramount purposes of this association is to advance the art of architecture, and by the professional co-operation and collaboration of all its members to secure for and to provide municipal, county, state and national governments with the highest and best expression of the art of architecture in the designing, planning and construction of public buildings, structures and improvements and at the least possible cost. It is not intended that this association shall accept or perform architectural services for private individuals, firms, or corporations; but this shall not be deemed to prevent the association from rendering any of such services to its own members."

(Continued on page 14)
THE GARDEN

The garden of Mr. James Hoatson, in Los Angeles, is a peculiarly convincing illustration of the effectiveness of lines. Here is a succession of terraces and walls, which repeat the long horizontal treatment of the villa on the crest; while the long straight flights of steps, the Italian cypress trees, the slender lamp posts, accent the vertical.

When it is resolved into its elements, this is clearly a composition of vertical and horizontal lines. The occasional arches, urns and shrubs relieve the ensemble from any feeling of stiffness. But the long sweeps of practically unbroken line produce an effect of dignity and of spaciousness that is remarkably fine.

The general treatment is marked by simplicity and restraint. What there is of ornament has delicacy and refinement of detail; there is a well-preserved sense of scale.

Here, in short, is Italy graciously wedded to California; the fine flower of the ages flourishing in the fertile soil of the new world. May this union be blessed and its fruit be prolific!
FROM THE UPPER TERRACE OF MR. HOATSON’S GARDEN

THE UPPER TERRACE WALL, MR. HOATSON’S GARDEN
STEPS FROM UPPER TERRACE, MR. HOATSON'S GARDEN

FOUNTAIN ON THE HOUSE TERRACE, MR. HOATSON'S GARDEN
PATIO, RESIDENCE OF MR. S. W. F. STEELINGER
BEVERLY HILLS, CALIFORNIA
H. H. WHITELEY, ARCHITECT

PERGOLA AND PATIO, RESIDENCE OF MR. G. VAN CAMP
LONG BEACH, CALIFORNIA
H. H. WHITELEY, ARCHITECT
1. RESIDENCE OF MR. H. M. RUBEY

LOS ANGELES, CALIFORNIA

H. H. WHITELEY, ARCHITECT

2. RESIDENCE OF MR. GILBERT VAN CAMP

LONG BEACH, CALIFORNIA

H. H. WHITELEY, ARCHITECT
RESIDENCE OF MR. JAS. HOATSON

LOS ANGELES, CALIFORNIA

PIERPONT AND WALTER DAVIS, ARCHITECTS
RESIDENCE OF MR. GEO. COAKS
PEBBLE BEACH, CALIFORNIA
PIERPONT AND WALTER DAVIS, ARCHITECTS
RESIDENCE OF MR. GEO. COAKS
PEBBLE BEACH, CALIFORNIA
PIERPONT AND WALTER DAVIS, ARCHITECTS
RESIDENCE OF MRS. MUCHMORE
LOS ANGELES, CALIFORNIA
PIERPONT AND WALTER DAVIS, ARCHITECTS
ENTRANCE DETAIL, RESIDENCE OF MRS. MUCHMORE
LOS ANGELES, CALIFORNIA
PIERPONT AND WALTER DAVIS, ARCHITECTS
Messrs. Pierpont and Walter Davis have lived up to their reputation in the house built for Mrs. Muchmore, in Los Angeles. It is a home with distinct individuality, and charming as the house is outside, it is the interior which excites special interest and admiration.

There are three strikingly original points of treatment; the shape of the walls, their texture and their decoration.

The architects have used variously the pointed arch, the groined vault, the barrel arch, the flat ceiling. The plaster is so rough as to show the trowel marks in irregular profusion. And it is an all plaster surface; the base is merely a protecting fillet, and there is no cornice or moulding.

But these features are supplanted by an extremely interesting use of stencil decoration. In some cases this follows structural lines; it stimulates ribs or freize or casing; it becomes a mural panel in a lunette. Even so, there is nothing conventional in the broad frieze dying out into rough plaster, with oblong center medallion and spear-like scroll motive carried well up into the triangle above.

With crude color schemes, these rooms would be startling, bizarre; but with carefully studied and blended shades, this treatment is capable of limitless charming possibilities. Not the least point of interest it opens is the opportunity for people of good taste but small means to express personality.
Residence of Mrs. Muchmore, Los Angeles, California
FROM LIVING TO DINING ROOM

Pierpont and Walter Davis, Architects

A BEDROOM
The charter further says: "To secure to its members the benefit of a common centralized and aggregated service department and organization, comprehending departments of architecture, engineering, decorative arts."

"By allied and co-operative effort to secure for its members the benefit and assistance of the most competent and skillful engineers, artists, designers, draftsmen, workmen and assistants, by their common and united employment."

The association has planned broadly. It has its own drafting, engineering and superintendent forces; its own offices and its own entity throughout. As an association it has no capital stock; the rights, interests, privileges and liabilities of every member are equal and no member can have or acquire a greater interest therein, nor be subject to a greater liability, than any other member. A member is without interest in the assets of the association other than that conferred by his membership; on termination of membership for any reason, all rights and interests of the member in the assets of the association cease. Any gains the organization may make will be principally expended in those things that will be of aid to all architects in their professional duties, such as comprehensive architectural library, meeting rooms and educational facilities for draftsmen. It is intended that only the most nominal gains will accrue to the membership; hence, a membership is attractive and will be confined to those archi-
tects only who are in sympathy with the idea of this association and the opportunity it offers to give public service, and who have achieved the qualifications for membership. The by-laws so express this point:

"Any architect who, because of his ability and qualifications has advanced the art and profession of architecture and thereby is especially fitted to render professional services for public welfare, is eligible as a member of this association."

The membership is open to those individual architects who have achieved these high qualifications; by application to and approval of the Board of Directors and 90 per cent of the entire membership, such an architect becomes a member of this organization and, as evidence of such election, the certificate of the association is issued to the member.

The membership is safeguarded from those who fail to fulfill the loyal service demanded or who find the work irksome or not to their taste; a membership can be terminated by resignation of the member, for dereliction of duty to the association or other cause by a vote of 75 per cent of the members, or for any reason, by a vote of 90 per cent.

The cost of membership has been put at the nominal fee of $100; this has been fixed in the charter of the association, so that the entrance of any architect to the association will not be barred by its cost. The association desires the personal services of its members; not their money.

The members will be compensated for their services to the association paid out of the receipts from the various commissions accepted by the association. The Board of Directors fixes this compensation in each individual case and for each commission. The directors and officers receive no salaries.

It is not expected that the duties of the members will be onerous, but there are no qualifications in this respect. Every member has signed this document on the books of the Association:

"I hereby acknowledge that I have read the Article of Incorporation and the by-laws of this Association, and I do promise and agree that I will comply with and uphold the principles and aims of this Association as expressed in them. I further promise and agree that I will render promptly diligently and faithfully to the Association such personal service as may be assigned to me by the Board of Directors, and for the compensation, if any, allowed therefor by them, and will endeavor, to the best of my ability, to work harmoniously and unselfishly with my fellow members of this Association."

The business and the property of the Association is conducted, managed and controlled by the Board of Directors. Those first elected are:

Octavius Morgan, Edwin Bergstrom, D. C. Allison, Reginald Johnson, Myron Hunt.

The officers first elected are:

Octavius Morgan........................................President
Edwin Bergstrom........................................1st Vice-President
David C. Allison..........................................2nd Vice-President
H. M. Patterson..............................................Treasurer
J. J. Backus..................................................Secretary

Both directors and officers are subject to immediate removal for neglect of duty or other causes.

The initial roll of members is:

Octavius Morgan
Edwin Bergstrom
Myron Hunt
Reginald Johnson
David C. Allison
J. J. Bäckus
Henry M. Patterson
A. M. Edelman
Sunner F. Hunt
Harwood Hewitt
Rollin Germain Hubby
Sylvanus B. Marston
Robert H. Orr
Henry F. Withey
Carleton Monroe Winslow
Garrett Van Pelt, Jr.

Robt, D. Farquhar
H. C. Chambers
John F. Krempel
Elmer Grey
O. W. Morgan
Wm. M. Clarke
Alfred W. Rea
Piper and Davis
Arthur D. Benton
J. E. Allison
W. J. Dodd
Wm. Richards
Chas. F. Hummer
Gordon B. Kaufmann
H. S. Johnson
Clarence E. Voenerberg
Roy C. Mitchell

The administration of the work of the association and the operation of its departments is in accordance with the most efficient and economical practice; its chief divergence from the ordinary practice is its machinery for securing the collective criticism and service of its members. The talented designers, those men who have really been educated to know and understand the good things in architecture and to express them, those men who so seldom have the opportunity to function, this touch can never be lost because the opportunity by this association, and the member whose qualifications most fit him for the work in hand, will function most strongly on that work, and every member will contribute his ability to every structure that is built under the direction of the association.

The practical sides of the undertaking, as well as the aesthetic, are fully cared for; the association gives its most experienced minds to exercise the business and executive functions and to care for the structural, mechanical, electrical, architectural, sanitary and supervising problems. Its carefully selected and rounded out membership gives, in every branch of architectural work, a collective service that no private individual, firm or corporation can buy.
Hydro-Electric Development

By FRANK R. DEVLIN
Former President California State Railroad Commission

In my opinion, the one thing upon which the material prosperity of California depends more than any other, is the economical, timely and intelligent development of the hydro-electric resources of the State.

California more than any other state in the Union, and perhaps, indeed, more than any other section of the world, has been blessed in natural resources. First the lure of the mines arrested the attention of the world and beckoned the hardy pioneers to the new Eldorado of the West. Then came the transition from mining to agriculture, followed by the marvelous development of the deciduous and citrus fruit industry and now the State's magnificent harbors and the rivers tapping its wonderful, fertile valleys presage a wonderful shipping future, and it takes no great vision to foresee its opportunities, facing as it does the certain and comparatively early development of the Orient.

It has always been recognized that the only serious handicap to California as a manufacturing state is the lack of cheap fuel. Nature in dispensing her wonderful bounties was most generous to our State, but California never possessed coal either in character or amount that would be of any appreciable value in manufacturing industries.

(Continued from page 15)

The individualistic touch is necessary to all architecture and to every art; without it there is no life or interest. So in this organization, this touch can never be lost because the method of organization under which it operates provides that some individual member will always have the architectural expression of the problem, under and subject to the criticism of his co-workers.

This association intends to offer its service to all public officials. It intends to become a vital, active force in public welfare and will welcome opportunity to serve.

Such is the plan and the idea of this Association of Architects. Such is the vision of this group of co-workers who, through service to the public, each giving to every problem more than they can hope to be adequately compensated for in money, hope to inject a new idea, a new force into civil affairs, a new idea of service. An idea that, successful here, must spread far beyond the confines of this association, and we even dare to hope may develop into a new form of national fellowship, into a new development in the relation of this profession of ours to the civic authorities, and a new force in architecture which will be a definite vital step in the advancement of that art.

With the discovery and development of the California oil fields some years ago, it was hoped that this important link, so necessary to the strength of California's chain of development, was supplied. But the uncertainty of oil production, and the ready absorption of the California supply abroad as well as at home, reduced very measurably the hope that California was ready to take her position in the front rank in the manufacturing world as she had in practically every other line of commercial development. Today experts are endeavoring to estimate how long the California oil supply will last, and few made effort is being made to discover other oil deposits throughout the State. And at the same time engineers and economists are endeavoring to determine how long the supply in the coal fields will satisfy the demands of the Nation: survey is being made of the vast coal fields of Pennsylvania, West Virginia, and other coal producing sections.

California has, however, in another form and in an amount that is little short of stupendous, potential fuel and power that will, in my opinion, if intellectually developed, make California the leader as a manufacturing state as it was in mining and as it is in fruit raising.

The tremendous waste of power in this State which has been flowing down the mountain gorges and to the valley streams and thence to the sea in the form of unharvested and unchecked hydro-electric power is something almost unbelievable. Science has demonstrated that these millions upon millions of horsepower can be brought from the mountain gorges to the valleys to aid irrigation; to the seaboard to aid manufacture; to the railroads to facilitate transportation, and to the homes to make even more comfortable the residents of California.

With the readjustment period through which we have been passing, will come, in my opinion, an extended period of development. Industry and manufacturing will be promoted on a larger scale than ever before. But the one thing that the promoters of large manufacturing industries will first demand before locating a plant will be sufficient and PERMANENT fuel or power. Plants investing millions and tens of millions, will look further than a fuel supply for five years, or ten years, or twenty years; but they make inquiry as to what the fuel or power supply will be fifty years hence.

Unquestionably the most permanent, if not indeed the only permanent supply of power that Nature guarantees will be that of hydro-electric.

The Pacific Coast possesses approximately two-thirds of the potential hydro-electric power of the United States. Is there any question as to the future of California as a manufacturing state with this power available and waiting only the development and conversion from waste water into electric energy? The answer should be no; but the answer should be qualified, and I again repeat what I said at the outset, namely, that THE ONE THING UPON WHICH THE MATERIAL PROSPERITY OF CALIFORNIA DEPENDS MORE THAN ANY OTHER IS THE ECONOMIC, TIMELY AND INTELLIGENT DEVELOPMENT OF HER HYDRO-ELECTRIC ENERGY.

Timeliness means now. That is, it means an immediate recognition of our potential hydro-electric possibilities and an anticipation of the demands which, if we are to enjoy the benefits of those resources, soon will be upon us.

Economical development means comprehensive, business-like, scientific development with due regard to proper co-ordination of the various hydro-electric developments throughout the State.

Intelligent development means a recognition by the public that the development of the hydro-electric resources brings an added income and added prosperity to every resident of California whether immediately engaged in the electric development work; whether cultivating the fields, or orchards; whether engaged in merchandizing in the larger cities or towns of our State; or whether indeed employed as an artisan in any of the various industries of the State.

Intelligent development can be had only through a recognition by our people of the fact that fair and honest treatment must be accorded those who undertake such work.
The next step will be the full development of San Francisquito Canyon, Nos. 1 and 2, where fractional production now exists, and this production will make possible a grand total from Owens River sources of approximately 250,000 horses power.

In addition, the city of Los Angeles has won its suit against the Southern Sierras Power Company, and will be able, therefore, to develop an additional block of 135,000 horsepower in the Owens River basin, and, ever, will not be enough to meet the demands for power certain to be made upon Los Angeles, and, realizing this, the Bureau of Power & Light is now turning to other sources.

The Colorado, the city of Los Angeles has filed on some 500,000 horsepower, and is in a peculiarly strategic position because at the time that the Federal Power Commission was created W. B. Meredyth, the city's legal representative, turned his back into the power bill creating the commission a clause giving preferential rights in the development of water power to the municipality.

TRAFFIC DEVELOPMENT

Earliest possible relief of transbay and peninsula traffic problems is imperative. The course of the bay down the peninsula is one element of relief in prospect, the proposal to electrify the Southern Pacific lines to San Jose is another, and added ferry facilities another. The latter two being the design of the City of Anaheim, and the design of the Rastall Railroad, will provide them when conditions warrant. In any event the bay must be bridged as soon as possible.

Ultimately, with the anticipated growth of the City, and the growth of the City, the Bay District and Central California along the lines of the Rastall Report to the Chamber of Commerce, the fore-runner that will lead to a realization of the Burnham plan, all must be incorporated into the design of modern bridges. The design of several bridges, to say nothing of tunnels, will be necessary requisites of future traffic conditions.

In considering plans for bridges, the best of engineering talent will no doubt be employed; but the project carries with it an obligation involving appearance, the artistic fulfillment of which must assure our people that the proposed bridge will result in the disfigurement of our incomparable bay landscape.

Bridge building in ancient times developed into an art in which the highest artistic ideals found expression. The bridges however were of masonry construction. The introduction of iron brought about the design of modern bridges presented a new problem which as yet has not, except in rare instances, found high artistic solution. The introduction of steel in building construction has, in modern skyscrapers, evolved some of the world's most artistic productions. It is therefore not impossible that a steel bridge may be not only practical and economical, but artistic as well.

Equally important would be the beautification of the highways with restrictions that no building shall be within seventy-five feet thereof. This is highly important, in view of the fact that the magnificent avenue of trees along the present highway between San Bruno and San Mateo, is, with the advent of each new bungalow, garage or other building, being rapidly and needlessly cut down—indeed, it already has been between San Bruno and Daly City.

Indeed, all highway work both State and National should carry with it restrictions against the destruction of groves and provide for the planting of trees. Such trees could, according to local conditions, or otherwise, be either shade trees, fruit trees, palm trees, or just trees. There is scarcely a limit to ideals of the city, and the city will be beautified with utility and profit that might not thus be secured.

Just imagine such a park-way through the heart of a congested city. This would naturally follow if such a project was wisely laid out, and the number of trees grew up to it. Such an effect would be comparable only to the Champs Elysees of Paris.

In other words, all highways should and could be park-ways, just as all bridges should and could be beautiful.

WILLIS POLK.
It is a very interesting experiment which has been started in Los Angeles. The progress of The Allied Architects' Association will be watched by the entire country, for a new principle of public service is involved. It has the spirit, if not the letter, of communism; but it has more practical promise of success, for ideal as the communistic theory may be, in practice the public control of industry has resulted in the destruction of initiative and the consequent letting down of efficiency, as we have found out to our sorrow.

This movement, however, is formed along practical business lines, and remains a private organization dependent upon its own exertions—and efficiency—for its existence. Its difference from other, strictly commercial, organizations, lies in the fact that it avowedly puts public weal before private profit. In other words, the association will give to public buildings not only the same expert attention which private work receives, thereby insuring full value for money expended, but in addition to this every portion of the work will be under the care of an expert in that special line, and there will be full co-ordination between all departments.

And here lies the experiment. Will a group of artists—for every architect worthy of the name must contain something of the artist—be able to harmonize their temperamental differences in order to conduct, successfully, work of this character? The answer to that question spells success or failure.

There is a hopeful analogy in the success of the Architects' Small House Service Bureau, which has been operating in Minnesota under a similar association to such purpose that the A. I. A. has authorized a National Architects' Small House Service Bureau with local Regional Bureaus, of which Minnesota becomes the first, to be followed soon by other bureaus now being organized. Full details of this scheme will be published when the local bureau is ready to operate; the significant point is, that the Minnesota group of architects has been able to co-operate harmoniously in the production of several hundred sets of working plans for small houses, involving mutual criticism and suggestion. Every good citizen will hope that similar success will attend the work of the Allied Architects' Association, with the certain consequence that the general standard of public service will be raised throughout the country.
SAN FRANCISCO CHAPTER

During the summer vacation no meetings of the chapter are being held unless specially called.

WASHINGTON STATE CHAPTER

A complete report of the Small House Service Committee, as presented at the 270th regular meeting of the chapter, June 11.

REPORT SMALL HOUSE SERVICE COMMITTEE

After nearly a half day of illuminating discussion, the convention of the Institute at Washington adopted the following resolution almost unanimously:

"The American Institute of Architects, in convention assembled, hereby endorses and approves the formation and proposed operation of The Architects' Small House Service Bureau of the United States, Incorporated, and encourages it to carry on its program with all dispatch and energy.

"It further directs the Board of Directors of the American Institute of Architects to follow the work of the Bureau in detail, and, at its discretion, to take such active part in the management and control of the Bureau as it may deem advisable.

"It further suggests to its Chapters that they take an active part in the formation of Regional and Branch Bureaus and do all in their power to make the work of the Bureau a complete success."

This is putting the conclusion of the matter at the beginning, but states immediately the objective.

Everybody knows that the shortage of houses throughout the United States. There are about 1,250,000 homes needed throughout the country. The cost of construction is high, and consequently very few houses are being built. It is the job that the Institute of Architects has to do its part in surmounting the difficulty. Mr. Kohn, when he was here, stated that he felt that everybody was entitled to his own home as much as everybody was entitled to an education, that the ownership of a home was as essential to good citizenship as was a good education, and that perhaps it might be necessary to finance home building in the same way that public education is financed.

The best way to approach the subject of small house plans is to follow the experience of the Minnesota Chapter, which is now incorporated and doing business selling plans. It has been selling plans for about one month, and at the present time sells from one to ten sets of plans a day. The Minnesota Chapter originally decided to incorporate and produce small house plans, institute advertising campaigns, and sell the plans by mail. It sells over ten thousand through a small paid organization. Before this was in operation the Southern Pine Association asked them to produce 100 different plans and work up a bungalow book. This immediately gave the Minnesota group a client and a good-sized job. The plans were produced and the book issued, the Southern Pine Association paying all costs in connection with the book and the Minnesota group bearing the expense of producing the four-scale drawings. The expense of producing these drawings amounted to about $35,000, which they expect to get back from the sale of repeat orders for plans. They have been running for a little more than a month now and orders for plans are coming in at the rate of one to three a day. The Southern Pine Association does the advertising in various cities where it has agencies. By this means the book and plans are sold.

The expense of $35,000 to the Minnesota group for producing drawings represents twice the drafting time plus 80 per cent for profit, which is the basis upon which most are to be paid who produce plans. Everybody is to be paid for whatever they do in connection with the Small House Service Bureau plus 80 per cent profit, payment being made at twice the drafting time. On the other hand, it is to be no profit on the stock of the corporation beyond 8 per cent. If the profit should be greater than 8 per cent, the excess is to be turned back to improve the service or reduce the selling cost of the plans to the purchasers.

The plans and the book were produced under two committees, one a committee on design and the other a committee on sales, as I remember it. The Committee on Design first works out a program of the number of plans that it wants of three-room, four-room, five-room, and mansard sixteen-room houses, and also determines the general arrangement of the plans by thumbnail sketches. This is done to avoid different men coming in with duplicate sketches. A complete set of blue prints, specifications, building materials and contract documents are sold for the average price of $25.00.

Since the approval of the Small House Service Bureau for the United States by the Institute, the Service Bureau has been incorporated nationally. Edwin H. Brucker, chairman of the Committee on Small House Plans, has been appointed the first president of the Bureau. The National Bureau is divided into thirteen Regional Bureaus, covering the entire United States, our division, being known as the North Pacific District, including Oregon, Washington and Idaho. The National Bureau is incorporated along the same lines as a Regional Bureau, and is controlled by a board of directors of not less than seven and not more than seventeen, and the usual officers. There is to be capital stock of $50,000, par value $100 each, and such stock is held in as the board of directors may elect. The stock of $50,000 of stock is divided into two kinds of shares, 500 shares of voting stock and the remainder non-voting stock. The voting stock is held by architects of good standing only, go architects holding non-voting stock. Non-voting stock may be held by anyone interested. It is desirable that at least ten shares at $100 each of voting stock be held up before the incorporation of any Small House Service Bureau. It is further felt that the architect members be members of the Chapter or Institute, and while it is presumed that the members of the Regional Bureaus will be largely Chapter members, all the Chapter members need not be present to carry on the Regional Bureaus except through the Institute's control of the National Bureau, which includes all the Regional Bureaus.

The organization of the National Bureau is similar to that of the Regional Bureaus except the National Bureau does not produce plans. It encourages the organization of Regional Bureaus for the purpose of helping persons of limited means to own their own homes, approves contracts between Regional Bureaus and clients, executes contracts between Regional Bureaus and clients, and contracts with the Bureau for the purpose of bettering the national publicity, and in general has control of the Regional Bureaus, but does not concern itself with their work only as the Institute concerns itself with the work of the Chapter. The design work is done at the expense of the Institute, and the work of the board of directors is to be done at the expense of its members.

The National Bureau is to have a board of directors of not less than three or more than twenty-seven, and the usual officers. There is to be one director for each Regional Bureau and the Institute is to elect one director more than all the Regional Bureaus. By this means the Institute always has control of the National Bureau.

The capital stock of the National Bureau is to be $50,000, paid up as may be determined by the board of directors, composed of 5,000 shares at $10.00 each. One hundred of the shares of stock shall constitute the voting stock, and 4,900 shares non-voting stock. The voting stock of the National Bureau is in the voting stock of the Regional Bureau in that the stock of the National Bureau an individual may have as many votes as he has shares of stock, whereas the Regional Bureau he can only own one share of stock.

Mr. Sexsmith, as well as myself, attended the pre-convention meeting on Small Houses. He also stopped off at Minneapolis and looked over the organization of the Regional Bureau and will tell of their operations.

Mr. Purell has explained to you in detail many of the features of the organization of the Regional Bureau and the probable liability of the formation of a Regional Bureau in the Pacific Northwest. All of us know that it is part of the architect's job to help work out the existing housing problems, and I believe that to a limited degree. Here is an opportunity already formed, and it should be accepted on some such conditions as are given later on.

(Continued on page viii)
Nationally, with the efforts the Chapter has made previously toward helping to solve the housing problem locally, the working drawings that were made and exhibited of a number of small houses, the assistance given to the More Homes Bureau during the war. The Chapter, through the chairman of its Committee on Small Houses, was also able to give a considerable boost toward broadening the scope of the work of the National Bureau just organized. Before the convention, your chairman was in consultation with the general manager of the West Coast Lumbermen's Association with the idea of taking on the West Coast Lumbermen's Association as a client, under conditions similar to those existing between the Minnesota Small House Service Bureau and the Southern Pine Association. The manager informed your chairman that the Lumbermen's Association of the United States had recently appropriated $200,000 for advertising purposes and, after the Small House Plans Proposal of your committee was explained to him, he stated that he considered our proposal the best form of advertising for their organization that had yet been submitted to him. This sounded encouraging toward the getting of a good client with funds already appropriated for the matter they had in hand.

In discussion with the general manager of the West Coast Lumbermen's Association it developed that the whole United States might be covered as readily as the Pacific Northwest, and it all finally resulted in the chairman of your Small House Committee calling upon the general manager of the National Lumbermen's Association at Washington, D. C, through the means of a letter of introduction from the general manager of the West Coast Lumbermen's Association of Seattle. At Washington a meeting was arranged with Mr. Brown, the president of the Institute's National Bureau, and with Mr. Compton, general manager of the National Lumbermen's Association, and your chairman. This conference resulted in negotiations being immediately opened between the National Bureau and the National Lumbermen's Association, looking toward a national agreement between these two bodies similar in character to the more restricted agreement made between the Minnesota group and the Southern Pine Association. This arrangement results in the National Lumbermen's Association becoming a client of the Institute's National Bureau, and then the financial part of the program is immediately pretty much taken care of—and by the way—the financial question in connection with the Small House program is the most difficult one to solve. If such a national agreement is entered into the plans produced by the National Bureau would be distributed through the organization of the National Lumbermen's Association, which reaches every city, town and village in the United States, and every prospective home builder would be advised through his local newspapers of the work of the Architects' Small House Service Bureau of the United States, Incorporated, and the general project would be pushed by an organization of the strength and ramifications of the National Lumbermen's Association. The National Bureau of the Institute would be able in a few years time to make its impression upon the domestic architecture of the United States. Thus by one negotiation between the two national bodies the greatest problem that architects have had and have left undone will be advanced toward a desirable solution throughout the country.

Respectfully submitted,
A. H. ALBERTSON, Chairman.

RICHMOND PORCELAIN PLANTS GET ORDERS REACHING $8,000,000
Richmond, July 11.—Indicating the bright prospects ahead for manufacturing interests, the three porcelain plants operated in this city by the Pacific Porcelain Ware Company have orders booked ahead that will necessitate enlargements and keep them running full blast for at least two years. It is reported that orders from the Orient and Europe total $8,000,000. These are the only porcelain plants in the country operating to capacity.

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COVER

From the Garden, House of Pierpont Davis, Architect, Los Angeles.

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Mrs. E. W. Halliday's Residence, Santa Monica
Mrs. E. E. Easton's Residence, Los Angeles
Walled Garden, Mrs. Easton's Residence, designed by owner
Julian Eltinge's Residence, Los Angeles
Pierpont Davis's Residence, Los Angeles

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GENERAL BUILDING NOTES

San Francisco Industrial Exposition
A Warning From State Senator Rominger
The Power Problem

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††‡The editors will be pleased to consider contributions of interest to the Industry. When payment for same is desired, this fact should be stated.
††§News stands and dealers supplied through San Francisco News Co., San Francisco, Calif., or American News Co., New York, N. Y.
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DURING the last few years, the people of the Pacific states, and particularly of California, have had a peculiarly great opportunity to develop their domestic architecture.

With the constantly growing influx of home seekers has come a great demand for the careful study of the home and its environs. And along with this influx has come a good measure of talent—architects, decorators, landscapers and artisans—to put new stimulus into the situation. Those who had guided the old order of things have kept such a firm hold on traditions as to make any too radical steps impossible while the newcomers with their fresh vision, enthusiasm and determination to succeed in the land of their choice, have been of invaluable aid in grasping existing precedents and conditions and assisting in their development. The combination has been most fortunate, and the results have won quick and universal commendation throughout the country as is testified to by travelers and press alike.

It is no more than natural that this development in domestic settings should take place in California, for scenically, climatic-
ally and even socially the conditions are most favorable. These very conditions have attracted the types of clients and advisers who have in turn grasped the significance of the conditions and developed them. The great spaces of sea, mountains, valleys and deserts have all contributed to a freedom from the restricting conventionalities of the older communities and helped toward a spontaneity and individuality of expression that is most delightfully refreshing.

This freedom has been enhanced by the wonderful climatic conditions that so universally lure people out of doors into gardens that can be enjoyed and worked all the year round. House and garden are lived in as a unit and are more and more planned as such even in the more modest homes. Patios, open to the sky, function as living rooms, pergolas as dining rooms and porches as sleeping apartments to such an extent as to give an amplitude, freedom and beauty to home that is far more difficult to achieve in more rigorous climates.

These foregoing conditions re-act on social conditions, breaking down false restrictions and formalities and substituting an attractive, exuberant out-in-the-open type of community life that is producing a civic betterment through free and friendly co-operation and a striving after the realization of ideals fostered by conditions.

This heritage which Californians have, they are more and more awake to as their travels or new comers call attention to existing contrasts; to the greater problems or restrictions of other portions of the country. This awakening, especially among the older residents, to their great good fortune, is bringing with it a new and wholesome sense of responsibility for the future of their heritage, as it touches the outward aspect of things and their social progress. This factor has contributed largely to their latter day willingness to turn resolutely away from the strongly individualistic and sometimes rather self-centered attitude of the past and join hands under an intelligent, specially trained leadership toward better architecture and a more cautious conservation of natural resources effecting that architecture. In other words, the pioneer days are over and that
And how thankful we can be that the buildings of the transitional period were not expressed in permanent materials! As it is, we find ourselves free to abandon a great mass of mediocrity. It is easily torn down and forgotten. That little which is good can be and will be preserved. Generally speaking, it may be divided into two groups—those buildings which are inherited from the early Spanish padres and those which have been transplanted more directly from New England or Europe. The first group provides a type which, especially when combined with the Mexican or Spanish Colonial prototypes, comes nearest to being indigenous and is therefore for historical, sentimental and practical reasons, a proper type on which to base the future building of the native sons. But, for those countless new comers there must for years to come be an assimilation with adaptations of other styles in order to give those from afar a sympathetic back ground. This, fortunately, can be appropriately done, as scenically and climatically, Cali-

indomitable spirit of those days to which we owe so much, is giving place to the more permanent, constructive work for the future. Where the pioneer in the vast, rich, new territory was dominated by the natural luxuriance and led into extravagant methods of attaining his own hard-fought-for goals, through his own work; now, with a denser population, with the roughest preliminary work done, and face to face with the costs of those preliminaries in natural beauties, there is an anxiety for the future building coupled with a gratitude for present blessings that promises well for California's taming time and has enabled her people to adopt the ideals of New England along with the spontaneous freedom of the West.

It is this combination that has been adjusting itself through what might be called the transitional period of architecture in California. That period is not completely over but there are everywhere encouraging signs and those who are sensitive to beauty in architectural design and structure are certainly justified in their hopes that a more permanent order of things is with us, and even though it is in its infancy only, it promises much.
fornia reproduces the best in many lands and as long as she is, in a sense, a melting pot socially, the architecture should express that fact. As time goes on, no doubt, the people will become more homogeneous in race and back ground and their homes will then take on a style typifying them in a true California architecture. But this complete unity is remote and what to some critics seems to be confusion in the present use of many styles and variation of styles, we shall have with us for years to come; and properly so, since to be truthful architecture should express the people. So, one might look at the present work as so many preliminary studies for the more permanent, unified architecture of the future. And surely with such a promising beginning, that future looks bright. While it is not to be inferred from the foregoing that perfection is in sight or that all Californians have awakened to the possibilities at hand, the leaven is very vigorously at work.

The steady improvement in quality and the great growth in quantity of well conceived homes in the State has been ably portrayed in the press of the entire country, and this forms one of the most powerful and attractive advertising mediums possible. Thus
the architect, interesting himself in a whole-hearted way in the difficult and not too remunerative problem of house design is really doing double service by serving both client and community.

Especially has this type of service been of value in Southern California where the phenomenal growth in population has gone hand in hand with an almost unparalleled activity in the production of real homes. The climatic conditions there have been peculiarly adapted to the purpose. But that factor alone could not persuade so many of the tourist visitors to remain. It has been in large measure the captivating quality of the domestic architecture and the ample gardens which has imprinted an irradicable picture on their minds to some day tempt them to return there to live. An example worthy of emulation, this!

It is true that because of the mildness of the climate, these southerners have been tempted to build less well structurally than one would like in many instances. It is true that because of this very climate, the moving picture world has centered there with its great influences toward extremes in picturesqueness and superficiality. But there is a
widening circle of professional men and craftsmen with their faces turned toward something enduring, who are achieving real distinction in spite of these influences.

The accompanying illustrations portray once again that quality which is linking itself so definitely with California and attracting such well-merited commendation. Both types of design, that from the Spanish Colonial and that from Old and New England are presented herewith. They are, however, in spite of their parentage and because of their freedom, spontaneity and individuality, truly Californian. With a rapidity hardly equalled in other sections of the country, they have achieved their gardened settings. If a few months will produce Mrs. Eastons' house and garden and a few years those of Mr. Eltinge and Mr. Pierpont Davis, what promise there is for their more mature appearance!

The home of Pierpont Davis, Architect, expressing as it does his background, typifies the charm and warmth of the western environment embracing the eastern precedents. It is of inexpensive construction but most carefully handled as to detail, proportion and setting. This quality, combined with the amplitude of the garden gives the whole conception a most satisfying appearance. It is but one of the many illuminating achievements of this man and his associates.

The home of Mrs. E. E. Easton is a new house falling into the same category. It still loses much for want of a mature garden, is a bit more radical in treatment, and would have gained in repose if the chimney stack had been tied to the mass of the house by a small gabled roof. But five years from now these points will be appropriately softened with the vines and shrubs already starting and a most attractive result may be anticipated.

The other houses, belonging to Mrs. G. W. Halliday and Mr. Julian Eltinge are of the more indigenous, Spanish Colonial type; the one a very simple bungalow embracing its walled garden attractively, the other a more pretentious home making an appropriate setting for its owner. In each the effect of quality is gained with tile and well-placed enrichments. In each is expressed the masterly and rather daring work of the new order of things pointing toward a true California domestic architecture.
The garden of Julian Eltinge is a striking example of the garden as oasis. To find such in the vicinity of a vast city like Los Angeles is indeed like coming upon an oasis in a sand-blown desert. Situated just outside the city, it dominates a hill overlooking a jewel-like lake, with beyond views of range upon range of ever-changing mountains. The beauty of it is so unexpected that it quite takes one’s breath away. But more than this the place is inspirational as a type essentially befitting the garden-art of the Pacific Coast.

Long ago Charles Eliot pointed out to us the fact that where a country is arid and its natural scenery wild and picturesque the gardens, which are confessedly “humanized” and personal bits of the scenery, have every reason to be laid out with formality and every excuse to contrast as vividly as possible with the outside world.

This quality of contrast—this apartness—is the very keynote of the mysterious charm which we associate with the world-famous garths of India, of Persia, and of Spain—all lands more or less arid and all wild and picturesque by nature. Historians explain the garden kinship that exists between these countries by telling us that each fell at one period or another of its course under the spell of the beauty-loving Moors. Interest-
ing is it to reflect how now in a distant day and in a far-distant land this same influence should be making itself felt again. Such a pleasance as this gives us proof; and it suggests besides that we are not in the midst of a mere "aesthetic revival" but of a real awakening to care for beauty.

Happily the use of the far-Eastern style of gardening has in California a rational basis, both on account of the physical characteristics of the state and on account of the traditions of the early Spanish colonists. Many portions of the Golden State have an almost uncanny likeness to portions of Spain, while both the laymen and the religious devotees who left such a strong impress on the land's early story brought with them across the sea the ideals of those enclosed gardens and garden-courts which they had known in the mother-country, and which in their turn bore reminiscences of the Orient.

Whence the spell of those gardens? How was their apartness brought about? Suppose we put some of our questions to the modern example before us.

First of all then, as to its seclusion—see to what an end of charm that is secured by means of walls, of vines, of boundary trees and shrubberies. House walls and garden walls, tower walls, and terrace copings singing together, there we have it—translated into a Gradgrind statement of principles, all count together, the house and garden make a unit just as they did in ancient Persia, just as they did later in the villas of the Mediterranean. This house is close-knit to the garden and the garden to the house alike by the house-plan, by the garden lay-out, and by the various architectural accessories of the garden. They are expressions in different media of an identical or of an almost identical art-concept. The result—fairyland.

Walls, trees, shrubs and close-trimmed hedges co-operate with rare success to isolate
this spot from its somewhat heterogeneous immediate surroundings and turn it into a veritable realm of enchantment. All the separate features, intriguing in themselves and each worth study for some special excellence, help to bring about the desired seclusion and give a pardonable illusion at the same time of absolute distance from everything mundane. We are reminded of those fairy rings on the grass that as children we all used to believe in.

To condescend to a more homely figure of speech, this isolation may be compared to the way we use a frame around the picture on our walls within-doors. The frame, we say, makes the separate beauties of the picture count. It concentrates our attention on them and sets them off. Just so because this garden is set apart our enjoyment of it is concentrated and intensified. We discover tenfold more delights than otherwise we might have discovered in the orderly paths, the happy flights of steps, in the softness of the green turf, in the brilliance of the flower masses, and the tropical waving of papyrus fronds. We are more sensible of the masterly disposition of the plants according to the different levels, and more appreciative of the mystery of the water and its reflections in the long canal that marks the axis of the lowest terrace of all and that provides its center of interest.

The longer we ponder the more we become convinced of the value of co-ordination and of restraint. We are glad that this garth is not as old Sir Francis Bacon put it, "too busie of workes." There are as a matter of fact, architectural accessories many and diverse, rich in color and in fancifulness. But each seems to have a real reason for being and all together they do not clamor for attention nor compete in interest with the horticultural treasures abounding on every side.
We realize that the many varieties of plants here set before us have been chosen not merely as interesting and pleasing specimens but also as regards their adaptability to ensemble work. Many of these are rare and exotic, many again are fragrant with homely and even humble association.

We revel at every new turn in some new panoramic view and note in what a royal fashion the house dominates the garden as that in its turn dominates the scene. We find that the vistas which stretch so invitingly outward, make only the more surely for content as we look again into the pleasance. The regularity of the plan of the sunk garden impresses us with a "sweet reasonableness." The richly tiled octagonal fountain, the trimness of the clipped cypress hedge with its orange tree accents, the wall basin with its guarding figures, take their places in the scheme but do not obtrude on us. This —so we come finally to see—is no mere oasis for a traveler to pass through after all, but a place for a man to dwell in. Striking as it does a note of splendor that carries the fancy to Arabian Night dreams, it also possesses every requirement of a modern garden. It will bear the day-light. It would answer perfectly to the ideal of one recent English writer, John Sedding as being "full of intention, full of pains (without showing any), half common-sense, half romance," though some of us forgetting the rules of arithmetic might amend the sentence to "half common-sense" yes, but also full three-quarters romance.
RESIDENCE OF MRS. E. W. HALLIDAY
Pierceont & Walter Davis, Architects
Santa Monica, California
Plate 15

Main Entrance
Pierpoint & Walter Davis, Architects

Residence of Mrs. E. W. Halliday

Santa Monica, California
RESIDENCE BUILT FOR E. E. EASTON
PIERPONT & WALTER DAVIS, ARCHITECTS
WALLED GARDEN BUILT FOR E. E. EASTON

DESIGNED BY MRS. EASTON
RESIDENCE OF JULIAN ELTINGE

PIERPONT & WALTER DAVIS, ARCHITECTS

LOS ANGELES, CALIFORNIA
LOS ANGELES, CALIFORNIA

RESIDENCE OF JULIAN ELTINGE
PIERPONT & WALTER DAVIS, ARCHITECTS
Plate 20

THE BUILDING REVIEW

Vol. XX, No.

PHIEF FORT & WALPGE DAVIS, ARCHITECTS

MAIN ENTRANCE

RESIDENCE OF JULIAN ELTINGE

LAS VEGAS, CALIFORNIA

GARDEN ENTRANCE
THE BUILDING REVIEW

Plate 21

LIVING ROOM

DINING ROOM

RESIDENCE OF JULIAN ELTINGE
LOS ANGELES, CALIFORNIA
PIERPONT & WALTER DAVIS, ARCHITECTS
Los Angeles, California

Residence of Mr. Pierpont Davis

Pierpont Davis, Architect
LIVING ROOM
COTTAGE ON ESTATE OF MR. PIERPONT DAVIS.
LOS ANGELES, CALIFORNIA
PIERPONT DAVIS, ARCHITECT
LIVING ROOM

DINING ROOM
RESIDENCE OF MR. PIERPONT DAVIS
LOS ANGELES, CALIFORNIA
OWNER AND ARCHITECT
Every piece of decorative art to gain its full value should be seen only in its proper setting, in the place for which it was originally designed and in surroundings created by the same artistic impulse. The true significance of its design can become apparent only under these circumstances. This is especially true of the freer types of design whose strongly marked stylistic individuality will of necessity contrast violently with objects of a different genre and result in a discord which discredits both types. Here lies one of the major reasons for the disfavor in which the art of mid-eighteenth century France is held by many who know it only through scattered examples, having lacked the opportunity of seeing, as it were, a complete design unit.

It is to satisfy this need and to give an appropriate setting for a part of the Hoentschel Collection that the Museum through the further generosity of J. Pierpont Morgan, has recently acquired the woodwork of a room of the period of Louis XV. The paneling has been installed on the second floor of the Morgan Wing (fig 1). In its original position the woodwork probably made the four walls of a room, but the exigencies of installation have necessitated a three-sided arrangement with the omission of the alcove enframement which is on exhibition close by. It is impossible to say just what the original arrangement was, but the presence of an alcove, about ten feet in width, would

---

*It occupies an alcove 13 ft. 2 in. deep and 21 feet wide. The woodwork is 14 feet, 1 inch high from floor to spring of cove.*
suggest that it was a bedroom. At the period, even among the lesser society, the latter was used largely for reception purposes, which would explain a treatment somewhat over-elaborate according to modern ideas, as may be seen by glancing at any of the numerous engravings of domestic interiors published during the eighteenth century.

The woodwork comes from a house in the Rue Thorigny, Paris, which is said once to have been in the possession of Madame de Pompadour. Thus it comes from the quarter of the Marais, occupied in general during the period by the lesser nobility and the richer bourgeoisie, or upper middle class, and it was probably for a family of the latter class that the room was made, somewhere between the years 1740 and 1750. We cannot of course judge such a room by the ultimate standard of the princely work at Versailles carried out by Verberckt and the brothers Rousseau, or even by the gorgeous decoration of the Hotels de Rohan and Soubise in the same quarter. Too often, however, we are blinded by the superlative qualities of creations of this type, which are of course few in number, and fail to see and appreciate the quality of the work done to supply the needs of a slenderer purse and humbler taste. The new room is a good example of this latter type and shows to what a degree of excellence the better class of popular work had attained at this date, following in its own way the tradition and developing standard of the court.

The architects of the day furnished for the smaller work oftentimes but the slightest indication of the interior treatment of the rooms. These were completed by the "menuier" who was both carpenter and carver, either from the verbal instructions of the designer or following his own invention stimulated by the various engraved designs published for this purpose. This free method tended to develop the individuality and judgment of the worker and is responsible in a great measure for the piquancy and unique charm of the work.

In this connection it is interesting to compare the present woodwork with the plates in the "Traité du beau essentiel dans les arts," by Charles Etienne Briseux, published in 1752, probably somewhat after this room was completed. Of the two small reproductions given here, the more elaborate (fig. 2) is known to be from the above work, and shows a mirror-head treatment very close in both motive and design to the corresponding detail in the room (fig. 5). There is the same juxtaposition of short, crisp curves, a sparing use of the rocaille, and an almost identical garlanded vase with its supporting cartouche impinging on the glass of the mirror. The designer of the second of these two reproductions (fig. 3) is unfortunately unknown, though from the similarity of the engraving and design, it might well be part of the same work. In general design this is even closer to the Museum example and is evidently the solution of an identical problem.

In nearly all the designs in this work of

---

*Charles Etienne Briseux, architect and writer on architectural theory born at Baume les Dames, Franche Comté, in 1636, died at Paris in 1754.*
Briseux the same feeling of scale, of composition, and of design idea occurs, showing quite a characteristic individual style. This character, in its slight tendency to heaviness of ornament, occurs very evidently in the major panels of the room and is perhaps one of the less agreeable features of the design. In its original state, however, with the moldings picked out in gold against a light neutral tone background, this may not have been so apparent, as a strongly marked division between the glass and painted surfaces may have been necessary in the design. The rather unusual forms of the door-head and the overdoor panels, while finding no absolute parallel in the Briseux engravings, show clearly the same feeling and spirit. Internal evidence of this sort is rather slender basis to warrant a statement that Briseux was the architect, as similar forms and motives appear also in other contemporary engravings. Such is not beyond the bounds of probability, however, as Briseux was a practising architect, being known to have built a hotel in the Montmartre district for the Fermier Général d’Augny, besides being the author of several architectural treatises which gave him considerable contemporary reputation.

While keeping the same feeling, the plates in Briseux’s publication all show a style slightly more advanced than that of the room and were probably the result of some years of previous experiment in practice, doing work which must have had a strong resemblance to that of the Museum acquisition and at the same probably exercising a considerable influence over his contemporaries, both professional and craft. This seems sufficient justification in any case for placing the room in the style of Briseux as representative of the more restrained and architectonic school which opposed the excesses of Meissonnier and is far more typical of the general cultivated taste of the period.

From the standpoint of design alone a great deal can be learned from the study of such examples, where the essentials in the design are not obscured by elaborate details. In this piece the delicate vigor of the work in the small panels, especially the pilaster strips, is worth careful examination. As in the best work of the period, harmony is obtained largely by the careful adjustment of curved lines of the same scale arranged in balanced series. Each design unit is thus composed of a number of opposed movements, no one overwhelming the other, but rather each converting its neighbor in turn, resulting in a whole static in effect but dynamic in quality. The subtlety and delicacy with which this idea is carried out forms the basis of excellence in all work of this period. The eye is led swiftly from point to point and never permitted to be bored, but on the other hand never permitted to be distracted by unmeaning violence.

—M. R. R.

WILLCOX HONORED

W. R. B. Willcox, with offices in the Empire building, Seattle, has returned to the city after a month spent in the East and Middle West. He was honored in being the first juror chosen by the Kansas City Commission to pass upon the relative merits of a nation-wide competition for the erection of a peace or liberty memorial. Architect Willcox was secretary to the commission and drew the report. The award was made to H. Van Buren Magouge of New York City. A new method of selecting jurors was adopted. The commission chose one juror, out-of-town competitors one and local competitors one. These three jurors selected a fourth and the Kansas City Commission a fifth. The work was passed upon by the jurors without any of the members knowing the men. The time given for the preparation of drawings, which period was from February 15 to June 29th, had expired before the jurors were chosen. Not more than $500,000 of the $1,500,000 fund subscribed by the citizens of Kansas City for the purpose is to be expended upon utilitarian structures to serve the purposes of veterans of the war, leaving $1,000,000 to be used in constructing a monument entirely of an idealistic nature commemorating peace.

INDUSTRIAL EXPOSITION NOVEMBER 9TH TO DECEMBER 10TH

The Central Bureau of San Francisco organizations recently announced that the date for the Industrial and Civic Exposition is November 9th to December 10th in the Civic Auditorium. It was only through the loyal San Francisco spirit of two large organizations which had engaged the auditorium for dates in November that the Central Bureau was able to obtain the auditorium for the exposition which forms a vital part of the San Francisco program of Dr. B. M. Rastall, industrial engineer for the San Francisco Chamber of Commerce. The two organizations which gave way and postponed their dates were the Native Sons of the Golden West which had planned to hold a bazaar in November for homeless children and the Mystic Shriners, who had chosen a date in the same month for their annual ball. Both recognizing the essential importance of the exposition to San Francisco’s advancement, waived their prior rights to the use of the auditorium so that the exposition might have four clear weeks for its educational purposes.

SAMPLES AND CIRCULARS WANTED

G. F. Ashley, formerly with Palmer and Hornbostel of New York, requests samples and catalogues, especially from western firms, for his newly opened offices, First National Bank Building, Oakland, Calif.
A WARNING FROM STATE SENATOR ROMINGER

Editor,
Building Review,
San Francisco, Cal.

Dear Sir:

Because there should be built up throughout the country a very firm intention on the part of the people to limit government expenditures, both within the nation and the state, I am taking the liberty of calling your attention to the very serious financial condition which California faces during the next two years, in the hope that any proposed new projects requiring funds may be at least delayed until it is possible to cut down some of the enormous expenditures and consequent taxes with which California is faced.

I am rather of the opinion, if a real appreciation is had in California as to what our financial condition really is, that there will be an even stronger reaction against the expenditure of funds than there is at the present time. Frankly, the condition is very serious, and I believe that the facts should be widely disseminated.

In spite of the fact that under the provisions of the King Tax Bill California will collect from corporations, banks, insurance companies and franchises the largest state tax in history, the state has entered upon a new fiscal year confronted with a constructive deficit of more than $2,917,845.25 for the biennial period. This is shown by a recapitulation made of all the apportionment measures passed by the legislature and signed by Governor Stephens, which total $91,690,326.09.

A deduction of $2,635,000 from this figure, however, should be made because this amount of money authorized by the present legislature will be paid in future years. This leaves a net authorized incumbrance on revenues and surplus for the present two year period of some $49,000,000.

The total estimate of revenue for the general fund is less than $80,000,000, while the budget estimate of surplus totals $7,000,000, with a possible under estimate of possibly a million more, and therefore provides the state government with total funds for the next two years of $87,000,000, which leaves a constructive deficit of at least $20,000,000.

The King Tax Bill is estimated by the State Board of Equalization to bring in $33,954,548.85, during 1921, as against $22,342,961.66 last year, or an increase of more than $11,600,000.

As a result of this condition, and faced with the knowledge that no additional taxes can be raised from the corporations for at least two years, and with the fact that the people of California will certainly not stand for any additional taxation upon private property, the state of California faces a period in which state officers and legislators must realize once and for all that retrenchment in state expenditures must be made, and that new projects requiring expenditures will not be tolerated by the voters.

As a result of this condition, there is very little chance that the coming special session of the legislature will be permitted or will for one minute desire to consider any legislation whatsoever requiring the expenditure of funds.

It is also equally certain that the people should look with extreme disfavor upon any proposed additional bond issues.

Whether we like it or not, this fact strikes directly at the power development program of the League of Municipalities, for there seems to be no chance for the setting up of any additional board or bureau in California having to do with the floating of state bond issues.

It has become more and more evident during the last sixty days that some plan is to be proposed for development of power within California, founded upon financial co-operation by the state with various cities in carrying the financial burden of this development, and inasmuch as the city of Los Angeles is the largest holder of power sites in California, and would probably be the first to use the state bonding capacity for the development of power in the High Sierras for the city's own selfish benefit, any chance for the carrying of even an initiative measure looking toward the establishment of a state power bureau seems impossible of passage.

Nor is this all. There are innumerable additional expenditures urged and to be urged to eat up the taxpayer's money. There are road bonds, building bonds, irrigation bonds, with others too numerous to mention, and I am calling your attention to only one specific case simply in order that the facts as to California's financial condition may be brought very thoroughly before the people.

Yours sincerely,

J. A. Rominger.
UNIVERSITY OF CALIFORNIA EXTENSION DIVISION

Courses in Spanish, Italian, French and Japanese are to be started in San Francisco by the Extension Division of the University of California, during the week beginning Monday, August 15th. During the same week there will also be classes opened in electricity, auto shop work for men, machine shop work, and auditing, according to the announcement from the San Francisco office, 140 Kearny street, where registrations are being received for the University extension classes.

The language classes meet as follows:

Spanish—Elementary and intermediate, at 1337 Sutter street, Monday, August 15 at 7 and 8 o’clock respectively. The classes meet on Monday and Wednesday evenings. On Friday evening, August 19, at 7 o’clock, a class in Commercial Spanish will be started by T. S. Romcro, the instructor.

French—Elementary and intermediate classes, Abbe Henri Langlard, instructor, will begin Wednesday evening, August 17, at 7 and 8 o’clock respectively. These courses will be held at 1337 Sutter street. An advanced course in French will begin Friday evening, August 19, at 7 o’clock.

Italian—U. P. Maggetti, instructor, elementary on Monday evening at 7, intermediate Thursday evening at 7, at 1337 Sutter street.

Japanese—Elementary at 6:30 and intermediate at 7:30 p. m., Thursday, August 18, at 1337 Sutter street.

A class in auditing, Judson Krueger, instructor, meets at 1337 Sutter street, Friday, August 19, at 7:30 p. m.

University of California Extension classes in machine shop work, electricity and other technical subjects, are announced by the San Francisco office, 140 Kearny street, as beginning during the last two weeks in August.

The machine shop course is the first to start opening on Monday evening, August 15, at the San Francisco Polytechnic High School, with Ralph Weaver as the instructor. This class, which will meet on Monday and Wednesday evenings at 7, is open to all persons interested in advancement as machinists. The instruction is entirely individual, the work being assigned to the student according to his capabilities, be he an apprentice or a master machinist seeking instruction on some intricate machine shop problem.

Classes in electricity start Tuesday evening, August 16, at the Polytechnic High School, under instruction by A. L. Jordan. Classes in both direct and alternating current electricity will be held. On the same evening a class in auto shop work starts at the Cogswell Auto School, Folsom and Twenty-sixth streets.

The University Extension course in the Diesel engine opens Monday, August 22nd, at 1337 Sutter street. This is an intensive study of marine and stationary installations and is given by C. G. A. Rosen. On August 30 a class in Shop arithmetic will start at 1337 Sutter street.
THE POWER PROBLEM
By E. P. GREGSON
Traffic Manager, Associated Jobbens of Los Angeles

Both the railroads and steamship lines have announced certain rate cuts between the Pacific and the Atlantic coasts, and there is every indication that rail and water competition in the future will be a very real thing.

At the same time, officers of the Interstate Commerce Commission have just completed a tour of the Pacific Coast, gathering data concerning railroad rates. It would be a point of wisdom on the part of the Commission's Valuation Department to study the question of electrification of roads, for, if the railroads reaching the Pacific Coast are still not to lose business through increased competition with our new merchant marine, the operative costs of the railroads themselves must be reduced—and this not entirely through a reduction in wage scale.

One of the most important items of expense and one that could ultimately be reduced with far reaching and beneficial results to the nation as well as the railroads themselves in the cost of propelling power, i.e., of coal and fuel oil. Approximately one-third of the entire operating cost of American carriers goes to these items.

The fuel oil consumed by our railroads during 1920 was about 42 million barrels. This tremendous tonnage is oftentimes hauled 900 miles before it is made use of as motive power in locomotives. The proportions of fuel, both coal and oil, in the total tonnage movement of the railroads are astounding. The coal haul alone is more than double that of the agricultural harvest and the ore, steel and lumber hauled combined.

Why haul millions of tons of coal and oil by railroads at 50 miles per day when we can send its equivalent 180,000 miles a second by high tension current to points of consumption? Why haul an immense tonnage of fuel 700 miles to Chicago, or 1000 miles to Kansas City, or a similar distance from the Pacific Coast to Winslow and Albuquerque? In the Southwest, the Pacific Coast and the inter-mountain region hydroelectric power must eventually be substituted for the large quantities of oil now consumed by the railroads.

Electricity from the Colorado River, the Sierras and the Rocky Mountains must in the end be used not only to reduce the operating costs of the railroads and cancel unnecessary coal and oil movement on the much over-burdened transportation system, but in order to bring about a concomitant reduction in the cost of fuel by releasing to the markets millions of barrels of oil and large amounts of coal to be used in industrial enterprises, the navy and the merchant marine.

Two-thirds of the entire production of oil is used to create energy for transportation. The supply of coal and oil is not inexhaustible. Our western fields will not be able in the future to produce oil in sufficient quantities to take care of the needs of the railroads, the navy, the merchant marine and the industrial enterprises directly dependent upon oil.

That electricity will cheapen railway operation is seen from the following example: The Chicago, Milwaukee and St. Paul line is the first to have electrified 440 miles of its main line running through the mountainous regions of Montana. The cost of running a train of 3,600 tons in this region, figuring on the basis of pre-war prices, is computed at $1.26 per train-mile when propelled by steam, and 45c when moved by electricity; therefore, according to this example, a saving of $1 per cart. It follows that with lower lines grades than in Montana the saving would be even greater. Furthermore, an electric motor will run 300 miles, without a

(Continued on page 39)
After every great war, feelings of love and sorrow, of pride and gratitude, prompt peoples to erect monuments that the memory of their sons' deeds may not perish from the face of the earth.

One of the most noble and ambitious of these memorials has recently been decided upon by Kansas City. Through a well-conducted competition the city has accepted H. Van Buren Magonigle's designs for a civic center, on the high plateau adjacent to its Union Station.

Like the major theme of a symphony, there rises above the mass of buildings and bluff a lofty, slender tower. In effect it is a pyre, for a perpetual flame is to burn at its crest, "The Flame of Inspiration, guarded by the Spirits of Courage, Honor, Patriotism and Sacrifice, burning forever upon an altar high-erected in the skies, a pillar of cloud by day, a pillar of fire by night. * * * This great aesthetic center, serenely poised on its hill in the city's daily life, with the Memorial standing at its Gates, will be a constant reminder of the dominance of the things of the spirit."

Impelled by this proof of another western city's spirit of patriotism, it is pertinent to inquire what the progress may be with San Francisco's War Memorial. The loud outcries which proclaimed its beginnings have died away. The plans of its promoters are veiled in mystery. Why cannot we profit by Kansas City's experience, and emulate her success in realizing so fine an ideal?
change, while nine steam locomotives would be used to traverse the same distance on mountainous regions. Electrification will, therefore, mean a saving in the cost of motive power, in rolling stock, in wear and tear, in shops and equipment, in repairs and in man power.

Remembering, therefore, that electricity is cheaper for railway operation than coal and fuel oil, and remembering that in this section of the country (on the Pacific Coast) fuel oil is almost exclusively used for motive power of locomotives—the Santa Fe, for example, having used on its entire line during 1920 three tons of oil to one of coal—it will be appreciated what a tremendous revolution in transportation and a benefit to the country the generation of hydro-electric power and the substitution of it for fuel oil would be.

The present waste in tonnage movement is contributing to the high cost of restricting tonnage space for soil products, by absorbing a great amount of man power which would profitably turn to other occupations, and by being the principal cause of the permanent wear and tear of our railroads.

A good deal of the movement of coal is contemporaneous with the transfer of the harvest. A free avenue for rapid transportation of soil products, particularly in season, would undoubtedly reduce the cost of living. The cultural cost of tree fruits, for example, is a constant figure, the packing cost varies only slightly, but the cost of transport is the largest item of expense in the marketing of California products.

It is clear that when electrification of the railroads reduces terminal expenses—and there is no doubt that the reduction would be about 50 per cent or more—it follows that railroad rates would be reduced by a similar proportion, which in turn would reflect on the cost of living.

The generation of hydro-electric power will not only be a boon to the railroads, but to other enterprises as well. Public utility power plants in this country consumed in production of electricity during the year 1920, 13,090,000 barrels of fuel oil. Of the total production of 43,900,000,000 kilowatt hours, 62.4 per cent was generated by fuel oil, and 37.6 per cent by water power, when the total 100 per cent should be and could be produced by water power.

The problem of securing hydro-electric power is of great importance to the California agricultural and industrial interests as well as to the railroads. Financiers, investors and the public at large must lend their aid, if this problem is to be solved successfully. If the railroads are not to be superseded by water transportation agencies in moving California produced goods to eastern markets, they must see to the electrification of the western division, at least, and this electrification cannot be done haphazardly or by one municipality or state.

Arrangements must be made whereby all of the western states are supplied with hydro-electric power on fair and equal terms. To benefit California, the development of hydro-electric power must not be controlled by any one municipality or by any one state. California cannot benefit by reduced transcontinental freight rates unless the operating costs in Arizona, Nevada, Utah and other states of the Union are taken care of. To benefit California people, California power must not be used by California alone, and if we attempt to grab the Colorado for ourselves we will be losers instead of beneficiaries through such policy.

The California Railroad Commission assures, through the public regulation of rates and services of power utilities, fair play for producer and consumer alike. With such assurance, the public must co-operate with the power companies now in the field.

(Continued from page 37)
RESIDENCE OF MR. H. HELLWIG, SAN FRANCISCO
E. H. HILDEBRAND, ARCHITECT

RESIDENCE OF MR. HOWARD PAYNE, OAKLAND, CAL.
CHAS. W. MCCALL, ARCHITECT
THE BUILDING REVIEW

SEPTEMBER, 1921

25 Cents Vol. xx No. 3

Published in San Francisco
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Associate Editors—HARRIS ALLEN and HENRY H. GUTTERSON.

Business Manager—E. D. McDONALD.

Cover—Shield on Bank of Italy Building

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Stockton	Long Beach	Portland

Seattle
Salt Lake City
Pasadena
San Francisco
To one who had not been intimately interested in, or associated with, the construction of this building it would seem that the magic wand of our present day building methods, had practiced its art upon this important point of the city. This morning there existed a mere thing of drab walls, windows, doors, marquises, electric signs;
of this expanding institution, a competition was held to select an architect for it, and on April 2, 1919, a small group of selected architects as competitors forwarded for judgment the results of their studies. The program, which set forth the requirements of the building, contained in part the striking phrase, "It is the purport of the competition to secure for the Bank of Italy a building of brilliant design that shall express the character of the Institution * * *"] The competition was a successful one; it achieved its purpose, and obtained for the owners a building which warranted the preliminary efforts.

Walking out Market Street the structure is hidden from view, due to the location of the site in relation to this street, until it reveals itself suddenly and almost dramatically. One accustomed to the Bank Orders, so usual in this type of building enterprise, might find relief in this new expression for a banking building. The electric sign displaying "Safe Deposit Now Open" over the entrance can be the only claim to give to the design the attribute of having the appearance of a building housing a club.

White California granite is the material employed for the exterior, with an introduction of motifs in terra cotta. There is no material that conveys greater dignity and sumptuousness than granite, particularly in its natural finish as employed here. A rich ground story base is decorated with pilasters and engaged columns in the Corinthian style, with those elements adjacent to the entrance decorated in beautiful bands of carved ornament. The continuous balustrade at the second floor line but awaits a festive display of rich drapes, hangings and stuffs, for some gala occasion and it is not difficult to conceive of an old-world gorgeousness flaring forth at this level at the proper time. Dignified arched openings is the dominating motif for the windows, with an interesting small window articulation at an intervening floor. The entire exterior surfaces are rusticated, and at proper points ornamented panels, carvings and key-stones add charm and color to the entire mass, the whole being crowned with a well proportioned cornice. In general the scale of the building is large but the proportions pleasing.

The type of rounded corner employed was unique among the designs submitted in the competition, and this must have presented to the designers a genuine and difficult problem for solution and execution, the archi-

**CONSULTING ROOM, SCREEN DETAIL.**

stupid, stifling, a clot; this evening there lives a thing full of life, adorned in a garb of whiteness, standing out triumphant, brilliant. In contrast to its neighbors, gloomy in color, devoid of atmosphere, burdened with architecture, causing them, seemingly, to hang their heads dejectedly, this building stands forth, exuding success and self-satisfaction. Reposed and dignified, it has that restraint to mark it the work of a master.

New ideas and methods, a departure from the standard forms, a total abandoning of the ways that were, for purposes of administration and function, seem to have been the keynote in the entire scheme. Externally this finds expression, and internally, it is frankly apparent. From the very conception of erecting a building here, to its present completed stage, these definite new ideas and departures have been persistently carried through. A goal had been set, a persistent policy for its attainment adopted, and the end reached in a decidedly great achievement.

In order to obtain a building which would adequately and properly represent the home...
tectural difficulties being supplemented by the structural. The problem of bending two planes continuously around a corner, and doing this successfully, without the usual concave optical illusion occurring at those points where the arc of the circle meets and becomes tangent to the planes, is always difficult, and this condition with the resulting illusion obtains here. (It is just such a thing as this that robs the architect critic, who alone observes and feels such a condition, of enjoying complete satisfaction. Perfection in man is relative, and likewise is his creation.) The uninterrupted round corner has given to the building a sense of breadth and scale that could not have been attained otherwise. In place of three distinct exterior planes, or elevations, there is but one; a great continuous expanse of facade, stretching from end to end.

A corner entrance was a pre-requisite, due to the location of the building in its relation to those thoroughfares contiguous to it and its close proximity to Market Street. A feeling of constriction exists at this entrance and one is almost inclined to go in "sideways" upon entering; however, there has been no actual congestion of traffic at this point, except at those times outside of business hours when the public participated in "Open House." And this calls to mind the opening days, when public inspection was invited. It appeared almost strange that so many persons, of a number to constitute crowds, could have found sufficient interest to pour in and out of the place during the hours given over to them and finding therein something to attract them. Particularly at night when the building was lighted, did the myriad crowds give to it all the appearance of a place where people might congregate for entertainment. Over the entrance is placed a bas-relief decoration, but this is small in scale, and this smallness is accentuated by the bigness in scale of the remainder of the building.

The total exterior design gives a sense of largeness within, great rooms, great departments, functioning all together as a unit. How much better for the exterior to have accused architecturally these large departments or elements within, functioning together, rather than to have marked the individual layers of departments or floors! How much more inspiring are the large arched openings clasping together individual floors than would be puny small-speaking voids. The academician may find fault here and cry out against this. The total exterior effect was well worth the stress of attainment and the owners are satisfied, likewise the public—this is something, in fact a great deal.

On entering this building one is struck with the proximity of the real business and banking room to the front door; step in, and there you are! A great effect must be produced on the public mind as a result. This main banking room can well be given much consideration, and is an inspiring piece of work. It has a sense of bigness; it feels large, it is large, and it gives forth the impression of greatness and security. With its bigness and strength it has beauty, in mass, detail, and color, promising to set a pace for attainment in large banking rooms for a time to come. This room as seen in perspective stretches from the far end rear wall to the very front wall, and by the introduction of metal screens it is possible to close off the bank spaces proper from that portion of the building which might be used for other purposes after banking hours. One's eyes are immediately drawn upward, as though to challenge the fact of the size of the room, and they rest upon a ceiling that
is a splendid example of design. It is executed in plaster, and looks designed for plaster, and this should be sufficient to emphasize the fact that so often wooden ceilings and stone ceilings are “skin deep” only. A great panel scheme is employed here, with a flat beam motif, at the intersection of which architectural rosettes are placed and so designed as to be used as artificial lighting elements. The fact that the flat beam motif does not carry throughout its entire course that constant relation usually held so desirable and fundamental to the wall elements below, is rather welcome than otherwise. In a fine old example of architecture this would be pointed out and admired as a thing of charm, naivete, simplicity. The color scheme of the ceiling is soft, delicate and rich, as are the walls which are executed in plaster, of the color and texture of Travertine stone. The ornament in the bands which follow the outline of the arches is confusing on account of the texture of the plaster, and delicacy of modeling of the ornament.

The metal work of the screens, fittings and embellishments constitutes itself one of the most ambitious and best executed examples of metal work done in this part of the country. Of wrought and cast iron, beautifully colored, executed from models indicating an appreciation of the nature of the finished materials, this work presents a striking contrast to most of the attempts to do similar work hereabouts. The fittings such as check desks, settees, railings and lighting fixtures are as thoroughly well designed and executed as the major metal parts. A wealth of marble constitutes the wainscots, counters, and floors, laid in pattern throughout the public space.

Altogether this room constitutes and proclaims itself as such, the main objective, the most important part, the greatest functioning element of the entire scheme, and seems to justify in itself the construction of the building.

It is a novel experience for those of us used to doing ordinary banking business, in established institutions for this purpose, to find complete elevator service running to other departments. It is even a greater experience to step out of these elevators directly into the arms, as it were, of the Directorate, on the floors above. Have these directors figured a psychological moment? They must have, for certainly few of us could miss the feeling of intimacy and welcome and family-ness that results from such a situation.

The floors above the main floor, look “built (Continued on Page 51)
The Garden
Spring Flowering Bulbs in California
By DONALD McLaren

With the approach of Autumn, the thoughts of the gardener and the enthusiastic plant lover naturally center on planning for the Spring effect of the year to come, for in garden treatment and especially in respect to color effects the planning must be done months ahead. This, to my mind, is one of the chief allurements of garden work, the planning for future development and the great pleasure derived from watching these plans, which have been made months ahead, unfold and reach their maturity.

Undoubtedly, no class of flowering plants gives such universal satisfaction as do the Spring flowering bulbous varieties, as they all produce remarkably beautiful blossoms, unsurpassed by any other plants in the flowering kingdom, and in addition to which many of them are delightfully sweet smelling. They comprise an endless variety in habit, form, size and color, and are adaptable for many purposes, many of them flowering equally well under either outdoor or house culture.

One of the chief merits of the bulbous plants lies in the certainty and perfection with which they bloom and their ease of culture. By the proper and intelligent use of them we are able to obtain throughout the entire Spring, by careful selection, wonderful flowering effects, either in the herbaceous border or in our formal gardens. In the latter we may obtain striking masses of solid color lasting throughout the entire Spring months. Here in California we have had remarkable results in such massing through the careful selection and proper grouping of the various daffodils, tulips, Spanish iris, ranunculus and anemones.

Undoubtedly, at the present time, there is more universal interest displayed with reference to the tulip than any other of the Spring flowering bulbs, and especially regarding the May-flowering Cottage tulips and the mag-
significant Darwins in their apparently endless variety, all of which seem to do so well with us. The early blooming types of this bulb do not give good results in our State and are not recommended for anything but indoor culture here.

The tulip is called the aristocrat of the bulbs, the one with whose name is connected squandered fortunes, romantic tales, long history and other attributes of traditional aristocracy, and in addition to which it is the bulb which, more than any other, has made Holland famous. A native of Turkey and the Mediterranean, it is supposed to have first been introduced to Northern Europe about the year 1559, the date when, it is said, a Swiss botanist, Conrad Gesner, for whom the Tulip Gesneriana has been named, first brought the tulip from Constantinople to Augsburg. The tulip rapidly became very popular both in Holland and in England, and during the seventeenth century a veritable tulip mania existed, fabulous prices being paid for newly developed forms or types of the bulb; in fact, a florist of Amsterdam is reported to have paid the large sum of six hundred and forty pounds for a single bulb. However, tulip growing has now settled down to a steady commercial business, a growing of hundreds of thousands of the cheapest and best commercial sorts and the marketing of them for the best price obtainable, and hence the romance of the game has entirely disappeared.

The tulips most used for our outdoor work in this State are the May-flowering or Cottage varieties and the Darwins, the former having received the name Cottage tulips from the fact that many of the varieties have been collected from the cottage gardens of England, Scotland and Flanders, where they have been growing for the past fifty years or more. They present a most gorgeous appearance, the flowers being very large, of durable substance, beautifully formed and borne on tall, stiff stems, rendering them of exceptional value when cut for vases. Some of the best-known varieties of the Cottage tulip are the Gesneriana Spathulata major, rosea and lutea, Bouton d'Or and Picotee.

The Darwin tulips, however, are the real aristocrats of the whole tulip family and are fast becoming well known to all plant lovers of the state. Like the Cottage varieties, they are May-flowering and are very stately and beautiful, producing immense flowers, on tall sturdy stems attaining a height of two feet and over. They appear in great variety of both dainty and richly brilliant colorings, the centers of them being beautifully marked.
Their beauty, richness and perpetuity are making them extremely popular, and as cut flowers they are unsurpassable. The long stemmed, bold, durable flowers have a dignity exclusively their own. They are used extensively in herbaceous borders, in pots or pans for the house and are exceedingly useful for formal bedding work where special effects are desired. Some of the most popular and best known are Clara Butt, Dream, Pride of Haarlem.

Of all the numerous bulbs, it seems that the Hyacinth is the most typical Dutch. Tulips may have the greater name but to me the Hyacinth, a big, full Hyacinth, is essentially and entirely Dutch and as a matter of fact there is no place else in the world where this bulb can be grown to perfection outside of Holland. Even in that country, it takes no less than four years to mature a bulb, which is one reason, and a very good one, for its high cost.

Hyacinths are among the most popular and satisfactory hardy flower bulbs grown. Their wax-like, bell-formed flowers, borne in buxum trusses, are of matchless beauty and are also delightfully fragrant. The colors, shades and tints are wonderfully varied, from purest white through blush, pink, rose, etc., to deepest red, and from daintiest porcelain through blues to black purple, from cream through yellows to orange and rosy apricot, etc. Hyacinths succeed with everyone and may be had in flower throughout the winter, grown either in pots of soil or glasses of water, while for garden or bedding effects, they are gorgeously effective during the early Spring.

Among spring-flowering bulbous plants, the Narcissus family, which includes Daffodils and Jonquils, is one of the most important and of world-wide popularity. They are all very hardy and grow, increase and flower year after year in any ordinary good soil.

(Continued on Page 57)
THE BUILDING REVIEW

PERSPECTIVE COMPETITION FOR THE BANK OF ITALY, SAN FRANCISCO
WINNING DESIGN
BLISS & FAVILLE, ARCHITECTS
BANK OF ITALY
SAN FRANCISCO, CALIF.

BLISS & FAVILLE,
ARCHITECTS

Photograph by Gabriel Moulin.
BANK OF ITALY
SAN FRANCISCO, CALIF.

MAIN BANKING ROOM

BLISS & FAVILLE,
ARCHITECTS

Photograph by Gabriel Moulin.
BANK OF ITALY
SAN FRANCISCO, CALIF.

STAIRWAY TO INTERNATIONAL DEPARTMENT

BLISS & FAVILLE,
ARCHITECTS

Photograph by Gabriel Moulin.
BANK OF ITALY
SAN FRANCISCO, CALIF.

LOBBY SCREEN DETAIL

BLISS & FAUVILLE,
ARCHITECTS

Photograph by Gabriel Moulin.
BANK OF ITALY
SAN FRANCISCO, CALIF.

MAIN BANKING ROOM

BLISS & FAVILLE, ARCHITECTS

Photograph by Gabriel Moulin.
BANK OF ITALY
SAN FRANCISCO, CALIF.

MAIN BANKING ROOM FROM STAIR BALCONY

BLISS & FAVILLE,
ARCHITECTS

Photograph by Gabriel Moulin.
BANK OF ITALY
SAN FRANCISCO, CALIF.

EXECUTIVE OFFICES

BLISS & FAVILLE,
ARCHITECTS

Photograph by Gabriel Moulin.
BANK OF ITALY
SAN FRANCISCO, CALIF.

SAVINGS DEPARTMENT

BLISS & FAVILLE,
ARCHITECTS

Photograph by Gabriel Moulin.

BANK OF ITALY
SAN FRANCISCO, CALIF.

END OF EXECUTIVE OFFICES

BLISS & FAVILLE,
ARCHITECTS

Photograph by Gabriel Moulin.
SMALL HOUSES IN LOS ANGELES, CALIFORNIA
BUILT FOR SALE BY
LOS ANGELES INVESTMENT COMPANY
SMALL HOUSES IN LOS ANGELES, CALIFORNIA
BUILT FOR SALE BY LOS ANGELES INVESTMENT COMPANY
BUNGALOW WITH PATIO.
LOS ANGELES, CALIFORNIA
for business” and a hum of industry pervades the place. A modest degree of refinement and decoration have been carried out everywhere, with its greatest effect in the Directors’ Room, which is oval in plan, and likewise in the Women’s Banking Quarters. One expects to find a finer room for the Directors and one does experience a feeling of closeness, of low-ceiling when within it.

Due to the fact that the designers purposely chose an exterior motif that would bind floors together in pairs as it were, attempting to minimize the floor spandrels on the exterior as much as possible, there exists a feeling when within of being constantly “en mezzanine.”

The Basement is titled as Sub-Floor and deserves and attains this dignity due to the placement here of an ambitious safe deposit scheme, and banking quarters for special purposes. Stairways give easy and ready access to this area, and the scheme of decoration is consistently carried out here, as elsewhere.

San Francisco has progressed, for another monument of good architecture has been added to its all too few examples.

HOUSING THE COMPLEX ORGANISM
OF A MODERN BANK
By FREDERICK R. KERMAN

With the opening of the Bank of Italy’s new head office building, at Market, Powell and Eddy Streets, in San Francisco, a unique institution has been added to California’s financial and social community.

Every member of every San Francisco family will find within the four walls of this new structure, an appropriate place to transact banking business in all its various forms. Father, Mother, Sister, Brother—and even the “kiddies,” are individually provided with a particular place to do their banking and a suitable means of doing it.

CHILDREN

For the children who are embarking upon the important character-building period of their lives, the School Savings Department, on the main floor has been established. Here the old maxim, “a penny saved is a penny earned” finds exemplification in the method used to teach thrift and encourage the habit of saving. Members of the bank’s staff, selected for their special qualifications, direct the work of this department and give the necessary instruction in banking procedure to make each child an earnest and intelligent saver. Already more than 27,000 California school children are using the Bank of Italy’s facilities, and have accumulated over $800,000.

WOMEN

In recognition of the important position women now occupy in the management of both home and business affairs, a special Women’s Banking Department has been incorporated in the facilities offered by the bank. A department has been established on the fourth floor of the new building, under the direction of Mrs. Edward Dexter Knight, where every phase of banking may be carried on. Savings and commercial accounts are opened, investment advice is obtainable and matters of private or corporate trust arranged. In addition, classes for financial study are in process of organization, where the woman who wishes to learn household or business budget methods and other matters of banking custom will receive expert instruction. An information bureau is another feature of this department.

THE PUBLIC

The main floor of the bank is equipped for the usual transaction of general banking business. A particularly convenient arrangement developed in the west, known as the Unit System, permits each teller to pay and receive through the same window. This eliminates needless loss of time and inconvenience to the clients of the bank who wish to make a deposit and draw money. The same teller who receives the deposit can also cash checks and pay out. Each cage or unit is in charge of a chief teller, with an assistant and his bookkeeper.

SAFE DEPOSIT

On the sub-floor is found the safe deposit vault,—the largest in the west,—with a capacity for 26,000 boxes. Special vaults are also provided for storage, as well as for coin and book safe keeping. Coupon booths and conference rooms, immediately adjacent to the vaults, are available for the use of the bank’s clients. The International Department is also located on the sub-floor.

THE STAFF

The executive offices, new business, and credit departments occupy the second floor while the third floor is given over to the bond, trust and legal departments. The fifth floor is devoted exclusively to the expanding needs of the bank’s accounting, filing and clerical organization.

The sixth floor is occupied by the director’s room, oval in shape and handsomely decorated by one of California’s foremost artists Angelo Disc. Immediately adjoining this
room, is the auditorium, accommodating 500 people. Rest rooms, lockers, kitchen and lunch room for the women employees of the bank are also located on the sixth floor, while the seventh floor is equipped for the men of the bank and additional storage space.

The new Bank of Italy building is California's most complete banking structure, and in point of architectural beauty, workmanship and convenience, ranks among the finest in the United States.

HISTORY OF THE BANK
San Francisco's newest bank home, the head office building of the Bank of Italy, represents a definite mile-stone of accomplishment in the remarkable growth of California's foremost financial institution.

From a small, struggling bank with $285,000 resources in 1904 it has steadily forged ahead until today it ranks as the largest bank in the west. Not alone does its progress find reflection in the $170,000,000.00 resources, and more than 270,000 depositors which its statement now shows, but in addition the character of its organization and the scope of its operations tell in a striking way, the story of constant development.

With 36 banking houses in 28 of California's leading cities, and with affiliated banks or correspondents reaching the civilized people of the entire globe, the Bank of Italy in its 17 years of service has set a record for growth and achievement hitherto unparallel ed in financial history. In these comparatively few years it has constantly moved ahead, building its organization with progressive care, until today, it occupies a position of prominence among the largest banks of the nation.

In point of operation it has provided a unique and peculiarly helpful type of banking for a large state like California. It has given to the larger cities a great and powerful institution, capable of meeting the requirements necessary for large commercial enterprise. It has carried to the smaller interior communities through its branch organization, the same metropolitan facilities available in the city, making possible the development of agriculture, stock raising, dairying, and the industrial undertakings on a vastly more elaborate scale. It has moreover linked with a chain of impressive financial strength city and country, offering to each the advantage of closer and more intimate banking relationship.

The system of statewide branch banking in which the Bank of Italy has assumed first place among the institutions of this country, is not a new or untried method. For many years the banks of Canada and continental Europe have employed branch banking successfully on a large scale. The idea however was not generally adopted in the United States until quite recently and it remained for the Bank of Italy to develop the American requirements.

Nine new branches of the bank have been opened this year in Centerville, Hayward, Lompoc, Paso Robles, Sacramento, San Miguel, Tracy, Visalia and Sunnyvale. It is expected that in the near future two others will be established, one on Mission near 28th Street and the other on Polk near Sacramento Street. This will give the Bank of Italy four banking offices in San Francisco, one of which is the new head office building.

SPECIAL FEATURES
One of the show places of San Francisco today, is the new safe deposit department at the Bank of Italy head office building, where provision has been made for one of the most complete vault units in the United States.

Guarding the vault opening is a 50-ton steel door, so constructed that it is capable of resisting powerful explosives, or concentrated attack with an acetylene torch. Massive steel and concrete walls encase the whole, insuring safety against fire, flood, earthquake or burglary.

Within the vault lies row upon row of individual boxes, varying in size from the small individual file to the largest locker required for corporation documents. Some may contain whole chests of silver, precious stones, and treasured heirlooms. Others perhaps, only a single paper,—a will,—bearing testimony to the forethought of one who plans for the performance of life's wishes in the years that are to come.

The bank itself employs large vault area for the protection of coin and valuable documents as well as important books. Every day at the close of business these records and moneys are transferred to their particular quarters, and are closed in behind the massive door. Entrance is then impossible, until the time locks release their hold at the appointed hour, and the secret combination may again be used to draw the bolts.

There is in addition a special trunk and storage vault for the accommodation of bulkier articles that do not require frequent inspection.

Every facility is provided to make the use of this safe keeping not only convenient but pleasant. Special rooms are close by, where the boxes may be carried and examined in
strict privacy. In addition, larger conference rooms are available where a group may assemble to inspect valuables removed from the vault, when circumstances require the presence of several people.

Access to the vault floor is gained not only by the stairway from the main banking floor, but by an outside entrance, as well as elevator service from every floor of the building.

An inside elevator for use in transporting coin communicates directly with the vault entrance, through a special shaft concealed within the walls of the building.

Guards are constantly on duty at the vault during the daytime, while at night it is protected by electrical alarms and special police service. The alarms are so arranged that interference with the vault in any way will immediately sound warning signals and summon the police. The operating mechanism is within the vault itself so that nothing on the outside can in any way influence the operation.

In addition to the main vault, smaller repositories are located on each floor of the building where records may be kept during the day time or placed at night for protection against fire. These floor vaults are used for the bank's own miscellaneous papers that would be of no value to anyone else, and are installed merely for convenience.

The vault equipment of the Bank of Italy is of the most modern construction in every detail and represents the last word in safe keeping facilities.

SERVICE

A mechanical messenger, with the speed of Winged Mercury, is to be a feature of the communication system at the new Bank of Italy head office building.

The system installed by the Lamson Company is the largest in any bank on the Pacific Coast, and is known as the "Bell Mouth Power Control" type with 27 stations or independent lines reaching 27 points in the building. The Central Station will be on the Mezzanine, with connections terminating in each department at the bank.

More than a mile of tubing has been used in completing this installation, which involves some 500 curves or turns—enough to tax the skill of the most expert racing driver, if he could get through the tube. Each station is equipped with five carriers, capable of moving at the rate of 50 feet per second. Messages from any point in the bank can reach the central desk within five seconds.

Power is provided by a Spencer-Turbo Compressor, with a capacity of 200 cubic feet of air per minute.

THE LIGHTING SYSTEM

Almost everyone who visits the new Bank of Italy head office building, at night, comments immediately on the wonderful lighting effect, and then looks vainly for the source of all the illumination.

For not a single electrical fixture is visible on the whole main floor.

Although the entire room is literally bathed in brilliancy, the lights themselves are hidden from view, along the top of the decorative grill screen that surrounds the lobby. A metal trough lined with plate glass reflectors runs the entire length of the room on each side, and across both ends, and in this trough the bulbs are placed.

In all more than 300 lights are used, having an illuminating potency of almost 8,000 candle power. The effect of the reflectors is to intensify this, but without concentration or hardening. As a result the room seems to exude a soft, golden light from every corner, producing the most perfect form of artificial sunlight yet conceived. This light when thrown against the gold leaf of the ceiling seems to become vitalized, and falls back upon the marble floors and screens with even greater brilliancy.

In the upper floors a uniform indirect lighting system has been installed, through the use of hanging fixtures of a new and beautiful design. The glass bowls are of art glass shaped like inverted morning glories supported by decorative iron frames. Every part of the new building is supplied with abundant lighting facilities, representing the combined efforts of the country's best experts on interior illumination.

COMMUNICATION

First installation on the Pacific Coast of a combined mechanical and personally operated telephone system, with a capacity of 640 phones, has been established, with the installation of the branch exchange at the new Bank of Italy building.

The entire system can be used without the assistance of an operator if desired, but the arrangement has been so modified that it is also possible to have complete control in the hands of an operator as well. Nothing of the sort has been seen so far in Coast telephone devices, and in only a few of the larger eastern institutions has its installation been possible.

Enough wire is used in this equipment to supply a trolley line from San Francisco to Los Angeles,—the exchange room alone, requiring more than 2,000,000 feet of various kinds of wire. In addition, some 300,000
feet are used to connect the many inside phones on the various floors, not to mention the amount of wire in the incoming cables. In all there are sixty-six different sizes of wire ranging from the finer varieties, smaller than a human hair, to the main cable, as large as a man's wrist. Twelve types of cable are used, the largest containing more than 600 small wires, each wire being individually insulated with a combination color scheme for identification, entirely different from the others.

The board and equipment is the result of the combined efforts of more than 3,000 people, and represents the latest achievement in telephone engineering. The wooden partitions are of mahogany and when metal is required it is of mahogannized steel.

Calls can be handled automatically at the rate of approximately one every three seconds, though the actual limit is governed only by the number of incoming lines. If desired, this can be increased to any figure by adding to the amount of equipment in use.

The Bank of Italy requires three operators at the outset to administer service, over and above the great volume of business that is handled automatically. Each operator, however, is able to supervise the entire board without moving from place to place, and a call received at a busy station mechanically transfers itself to the operator who can handle it most expeditiously.

The rapidity with which the bank's telephone service has grown is remarkable. The first installation in 1904 consisted of one phone,—but by 1908 a small exchange was required with two lines and eight telephones. From this simple and meager equipment, the service has steadily increased to the point where in size for this particular design it ranks first on the Pacific Coast.

In addition to this special telephone installation, the bank has a complete Auto-Call system. With the combined facilities which these two services offer there are few institutions in the country more adequately provided with means of inter-communication.

DECORATIVE MARBLE WORK

Italian, French and Tennessee marbles have been used in perfecting the decorative combinations shown in the new Bank of Italy head office building. Of all these, probably the most unusual effects have been employed in the main lobby.

Artistic use of Black and Gold, Rosatto and Escallette marble, is shown in the banking screen that encloses the base of the entire room, as well as in the borders for the upper floors. The banking screen itself is self-supporting, without iron braces, necessitating sound and flawless marble throughout. Further employment of these handsome slabs is found in the treatment of the safe deposit vault lobby, as well as in the School Savings and International Departments.

The floors themselves are of Tennessee, French and Belgium Black Dot marble executed in checkerboard design with a broad border of similar oblong blocks. It has been found by long experience that Tennessee marble lends itself especially to the construction of floors because of its durable qualities and toughness. The quiet and unobtrusive design of the floor, forms an excellent background for the more beautiful and striking colors found in the Italian marble.

In the treatment of the upper floors and executive offices, French gray marble has been introduced as a base, outlining the lower border of the plastone walls. An artistic and decorative carouche has been selected for wall ornamentation, done in soft colors, in porous travertine. Similar materials are used in the treatment of the Women's Banking Department, on the fourth floor, where gray and mulberry coloring lend themselves with especial attractiveness to execution in marble.

In workmanship, materials, and coloring it is the opinion of experts who have examined the Bank of Italy, that the marble features are unsurpassed by any building in the United States.

ONE OF THE FLOOR COVERINGS

An oval Chenille rug of a size and form never before seen on the Pacific Coast, has been manufactured for use in the directors' room at the new Bank of Italy building.

The room itself is an oval, measuring nearly 45 feet at its greatest length and 31 feet in width. The rug will fit into this space, covering it entirely except for a narrow border.

The new rug was manufactured in Amsterdam, of Arden quality, the most attractive of all the Chenille Axminster weaves. It incorporates a two-tone design, giving the effect of a Sepia painting. A light brown background forms the foundation of the rug, on which the figures in darker shades are woven.

Much interest has been expressed by collectors of fine rugs and draperies in the bringing to the Pacific Coast of this unusual Chenille. It is expected that a special showing of the rug will be made privately as soon as it is received by the bank.
Department in basement, and the main stairway from basement to second floor, was executed by the firm of MacGruer and Simpson.

Worth special note is the ceiling of the oval Directors' Room on the sixth floor. This is in flat relief, covered with a dull gold, and is designed in that refined Italian Renaissance style familiarized by the Adams brothers. A similar, though simpler, treatment was used in the Ladies' Banking Room on the fifth floor.

The ceilings of the large offices on second and third floors are finished alike, with broad, flat paneling, but the enrichments change with pleasing effect.

The main banking room has a very beautiful coffered ceiling, previously described in this issue. To satisfactorily manufacture and install the material known as "Plastone Marble" on the walls, required a great deal of effort after a large amount of experimental work. The result speaks for itself. (See plates No. 27, 29 and 30.)

The same wall treatment was used in the stair hall and public portions of the basement, where the treatment of ceilings, necessarily very flat, is both rich, refined and vigorous. (See plates 32 and 33.)
Course in Building Mechanics and Construction

This course consists of twenty-five weekly lectures and problems, explaining clearly and thoroughly the principles of mechanics and construction as applied to building work. A few of the subjects taught are Mechanics and Statics, Analysis of Stresses, Properties of Sections, Theory and Design of Beams, Columns, Plate Girders, Roof Trusses and Bridge Trusses, actual Planning, Framing and Design of Members in a six-story, Class “C” Building as done in engineering offices.

Course in Reinforced Concrete

This course consists of twenty-five weekly lectures and problems on the theory and design of reinforced concrete construction. A few of the subjects taught are General Principles and Properties, Shears, Diagonal Tension, Bond, Stirrups, Rectangular Beams, Tee Beams, Continuous Beams, Flat Slabs, Columns, Framework, Retaining Walls, Form Work, Systems of Reinforcement, actual Planning, Framing and Design of Members in a six-story Class “B” Building.

Mr. R. S. Chew, C. E., has been engaged to conduct the structural classes for this season. He has directed similar courses at the Club for the past six years and is recognized as an instructor of much ability.

Organization Meeting, September 7, 1921, 8:00 P. M.
First Lectures, September 13, 1921, 7:30 P. M.

ATELIER

The Atelier furnishes a course in Architectural Design for draughtsmen in offices, and for students of architecture in general. The program of the Beaux Arts Institute of Design of New York is used, which consists of a series of competitions modeled on the system of the Ecole des Beaux Arts in Paris, and linked with American architecture. This enables the student to work in art that is regarded as the solution of certain fundamental problems, and consequently there is both interest and instruction in each competition.

There is no preliminary knowledge necessary, except a general knowledge of the five Orders of Architecture.

An annual registration fee of two dollars is the only fee required to enter competitions.

Circulars of information can be obtained from the Massier of the Atelier.

The Atelier classes will be under the direction of Ecole des Beaux Arts patrons.

First Problem, September 24, 1921.
F. Amandes, Massier.

Courses in History of Architecture, Heating and Ventilating, Architectural Modeling

These courses, especially designed for architectural students and draughtsmen, will be conducted by competent instructors during this class season. Future announcements will be made of the dates of first lectures. Further information may be obtained from the Chairman of Class Committee.

Application for recognition of these courses has been made to the University of California and is receiving favorable consideration. University credits are expected to be granted for successful completion of this work.

The above classes are conducted without profit. All funds received for tuition are used to obtain competent instructors and to defray the expenses of the classes.

SAN FRANCISCO ARCHITECTURAL CLUB
77 O'Farrell Street, Third Floor
T. L. Pflueger, President
W. F. Lynn, Chairman Class Committee

K. G. MALMGREN

There died recently in Spokane, Washington, K. G. Malmgren, an architect who, for three decades, influenced the architecture of his community. He went into Eastern Washington when the city, known as Spokane Falls, was in its earliest development, as a draftsman in the firm of Cutter and Poetz. That firm was one of the pioneers of architecture in the territory. On Mr. Poetz's retirement, Mr. Malmgren entered the firm and the majority of early constructions in Spokane were designed by Cutter and Malmgren. A few years ago the firm dissolved and Mr. Malmgren practiced alone until he subsequently took C. I. Carpenter into partnership. The death of Mr. Malmgren in his fifty-eighth year is a distinct loss to his city and state, not alone of a public-spirited citizen, but of an architect of note. The profession of the West Coast has lost an honorable member.

Credit as the Architects should be given to Reed & Coirlett, Oakland, on the illustration of the Pacific Mailing Book Company plant at Emeryville, Cal., shown on page 38 of the August issue of Building Review.

(Continued from previous page)
They may be grown in garden beds where they give wonderful results in formal work, where a mass of one color is desired; or they may be planted in the herbaceous border. They are also magnificent when naturalized, that is, grown as wild, in outlying portions of the garden or grounds, in the lawn or on terraced slopes, along stream-like banks and in semi-shaded situations. The flowers of the various types are of endless beauty and graceful forms, with a great variety of color combinations and many of them are quite fragrant. It is not only in the open that Narcissus may be grown, but they are equally valuable for winter flowering in the green houses, or in the window box, thriving in pots, pans, or boxes, and some of them in glasses like Hyacinths, or in bowls of moss or cocoanut fibre, with water. By planting them out of doors in the early Autumn, it is possible to have them in bloom here in California during the latter part of January.

The Anemones are highly ornamental Spring and early Summer flowering plants, having both single and double forms. The colors are remarkably beautiful, running through shades of blue, scarlet, rose, white, etc. In addition to the ordinary single and double types, there are three especially fine forms of this plant, Anemone Caen, the French or Poppy-flowered, long-stemmed and of excellent color; Anemone Fulgens, with rich, dazzling scarlet blooms; and Anemone St. Brigid, an improved race of Irish production, bearing magnificent flowers, double, semi-double and single and of the largest size as well as of the daintiest colors.

Among dwarf-growing flowers, the Ranunculus is unrivaled for its lovely forms and bright, attractive colors, ranging through gorgeous shades of crimson, white, yellow, etc., many of the varieties being beautifully marked with other shades. There are three popular forms of this beautiful little plant, all of which do exceptionally well when planted in the open and have proven most satisfactory with us. The double French are tall, very vigorous and robust, thriving in all soils while their flowers are excellent for cutting. The Persian are camellia or rose-shaped, intensely double and of very brilliant colorings in rich variety. The Turban varieties are the largest flowered and the earliest blooming of all of this family, the colors being very effective while the flowers are paeony-shaped, very large, with vivid colorings and compactly double.

One of the most interesting classes of bulbous plants are the Irises in their many forms. Among the most beautiful and hardiest is Iris Germanica or German Iris, the true Fleur-de-lis, but greatly improved. They are well termed "Garden Orchids" and they fairly outrival the orchids in wide range of coloring, both in dainty combinations and rich and vivid colors, including yellows from canary to deep golden; blues from soft lavender to intense purples; reds from pinkish mauve to claret and maroon; beautiful bronzes and pure whites. Some are marked and margined with other colors in exquisite harmony. All have showy yellow or orange crests or beads. Many of the varieties are delightfully fragrant. For garden and landscape decoration, groups and masses of them are very effective, being perfectly hardy, thriving and increasing year after year in any sunny situation in ordinary good soil, except a wet one, which latter is liable to cause the decay of the bulb.

The English Iris, Iris Angelica is likewise very popular, being perfectly hardy and bearing large handsome flowers, eighteen to twenty inches in height, with rich purple, blue and lilac colors predominating.

The Spanish Iris, Iris Hispanica has been greatly used with us, being very hardy here and growing luxuriantly in any ordinary California soil, and providing a very great variety of color.

One of the late Spring-flowering bulbs not as greatly used with us as it should be is the Ixia, a very dainty little plant, bearing long slender spikes of bloom, the colors of which are rich, varied and beautiful, the centers always differing in color from the other parts of the flower, so that blossoms expanding in the sun's rays present a picture of gorgeous beauty.

**AMERICAN PLAN IS FINAL—COMMERCE CHAMBER HEAD ISSUES STATEMENT**

The industrial relations committee of the Chamber of Commerce has issued a statement declaring no negotiations with labor unions or groups are pending or under consideration, and reiterating that the American plan is definitely in force in the city's building industry.

The statement, given out by Atholl McBean, chairman of the committee, follows:

"To dispel any doubts occasioned by unauthorized statements or rumors, the industrial relations committee of the Chamber of Commerce announces that no negotiations of any kind are pending or contemplated with labor unions or any group of individuals.

"We are going ahead with the building work of San Francisco on the American plan with nearly 6000 men at work and are constantly increasing this force.

"This work is open to all San Francisco workmen and we have been continually desirous of having them avail themselves of this opportunity.

"Work is accorded to all competent mechanics and no discrimination will be permitted against anyone on account of affiliation or non-affiliation with labor unions."
EDITORIAL

A survey of the situation in building circles in Northern California brings to light a peculiar phase of a long conflict. The public has assumed its rightful place as arbitrator.

The San Francisco Bay District in particular has been practically tied up since last May. Union leaders and mechanics claim it has been a lockout engineered by unscrupulous contractors in The Builders' Exchange. Contractors claim it has been a strike forced upon the mechanics by their leaders because of the latter's unwillingness to meet new conditions regarding wages as established in all fairness by a board of three arbitrators selected jointly by both sides. The third party in the situation, the Public, has long since ceased to care whether it is a strike or a lockout. They have had evidence one way or the other according to the newspaper they read until all pertaining to causes has become more or less uncertain. The average man does know however, that business is unduly demoralized, that he has suffered long because of the lack of construction work. He has been forced to postpone the erection of his new home, or business house and gradually his sympathies have swung decidedly against the tactics of the unions because they have seemed negative.

There is no quarrel with unionism, as such—not even among the builders. Many of them have been leading men in union circles in the past. They know, as does the public, that our best mechanics have nearly all supported unionism. They know that through unionism they have very materially bettered themselves and building methods. They all know that from these advances there should be no backward step.

But, hand in hand with these advances, there have come, through over-zealous leaders, types of oppression that were learned from capitalists in the past. The union's chief weapon, the strike, has been used to maintain negative policies of curtailment of membership and output to such an extent that the builders and the long suffering Public have risen up in condemnation. It became too unreasonable to operate under labor delegates' dictations. The public, paying the bills when increased output was so badly needed, could only see these negative measures as intolerable in principle. And so the pendulum swung in what was said to be a fight of the public for self preservation. The power of the strike was jeopardized because it was abused.

At the present moment there seems to have been a necessary bowing to the will of the public, acting through the Industrial Relations Committees of the Chambers of Commerce. Operations have opened up on the American Plan quite extensively. But there is much yet to do to establish the type of cooperation that must prevail if the badly delayed building program is to be stabilized. There must be high resolve on the part of all to further that compromise that brings positive, constructive results to the Public.

Even now there are indications of more warfare. The leaders would do well to realize that there are certain things that have been established beyond recall before attempting further moves. The Public has decreed that the American Plan has come to stay, giving any honest man the right to his best day's work. The wage question is not to be decided by unions alone but by all three parties involved. (This does not mean a return to the evils of the old pre-union regime when employers alone set the wages). Excellence of workmanship must be so recognized in wage returns as to foster the mechanic's pride of output and maintain a normal incentive for growth.

The right ideals of unionism under such conditions can continue in public favor—if these things are again hazarded, unionism itself will have to fight for its being. This should not and need not be.
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Cover—Entrance to Vocational High School, Oakland, California.

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C. W. Dickey, Supervising Architect

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A school building program is being carried on in Oakland under a five million dollar bond issue involving four million in buildings and one million in land. There will be three large new high schools, one complete Junior High School, and parts of five others, one new Neighborhood School, and parts of four others, four new Elementary Schools, and parts of twelve others. In each case where a part of a school is built the complete structure is planned so that future additions may be intelligently made.

The work has been handled in a somewhat different manner from other school building projects. It has been centered in a Construction Department where the first preliminary sketches originate, where all standards are developed, and where general information of all kinds is disseminated to the Architects. This department also handles the structural, mechanical, electrical and sanitary engineering, all specification work, details of technical equipment and finish, and all superintendence of construction. In this way the work is standardized and all the Architects are enabled to work along the same general lines. They restudy the design presented them by the Construction Department and then prepare the general working drawings. In this department the architectural work is directed

*Supervising Architect for Oakland Board of Education.
by C. W. Dickey, Supervising Architect, and the construction work by Marston Cambell, Chief of Construction.

The school building program has now advanced sufficiently to demonstrate the general character of architectural work that may be expected. Some of the largest and most interesting schools are yet not completely designed, but the bulk of the work is already on paper and many of the smaller buildings and additions to present buildings are completed and occupied.

Architecturally, the buildings partake of the spirit and environment of California. They are all low and of more or less open design, with many cloistered corridors and large interior courts. The architecture follows the various styles of the Mediterranean, with plain concrete walls and tiled roofs, with most of the embellishment concentrated at the entrances, beauty being obtained by a careful study of masses and proportions rather than by the use of columns, cornices, belt courses or similar ornament. The parking of the sites will be a vital part of the architecture.

The planning of these buildings from a pedagogical standpoint has been directed largely by committees of school principals and other experts and specialists from the Oakland School Department. The co-operation between these committees and the Construction Department has been most close, and all plans have passed their scrutiny and received their approval before being presented to the Board of Education.

The general business of the whole program for the first year and a half was handled by a committee composed partly of business men and partly of members of the Board of Education. Serving without pay, these gentlemen handled the work as if it were their private business. Politics were eliminated, and everything proceeded along strict business lines.

It was early determined that the construction must be as economical as was consistent with common sense. All small elementary schools are of wood frame construction with outer walls in general covered with cement stucco and roofs of terra cotta tile. The larger buildings for high and junior high schools are of Class "C" construction with walls of brick, hollow tile, or concrete finished with cement stucco and with tile roofs. These buildings are partly of one and partly two stories, ample exits being provided from the upper floors.

The prime object of those connected with this building program has been to get thoroughly practical and modern schools, with all needed facilities, designed in accordance with the most advanced pedagogical ideas, and so constructed as to give the school children of Oakland the maximum accommodation for the money available.

*Theodore Roosevelt High School*

The design shown herewith was made for
a proposed site facing a public park, but this site could not be obtained. The building will now be located on a block 300 feet square located on elevated ground between East 19th and East 20th Streets, and East 19th and 20th Avenues.

The design for this site has not yet been fully prepared.

University High School

Mr. E. W. Cannon is the Associate Archi-
tect on this school. It will accommodate 1200 pupils and will stand on a level piece of land 488 feet by 700 feet, lying on the east side of Grove Street and extending from 58th to Aileen Street, with an additional piece 130 by 200 feet, extending easterly to Dover Street.

The design calls for a two story building extending across most of the Grove Street front and facing west toward that street. At one end is the Auditorium and at the other a partially inclosed court with a walled garden for an outdoor science laboratory.

On the main axis of this building and opposite the main entrance is a large library flanked by two inclosed quiet courts for outdoor reading. Back of these occur two other courts which will serve for outdoor assembly rooms or study courts. These are surrounded by two-story portions of the building, most of the rooms being class rooms, with one large study hall connecting direct with the library.

Special attention should be called to the effort that has been made to deaden the noise from Grove Street. A corridor is carried along that side of the building on both first and second floor and all class rooms are faced toward the protected interior courts. The only rooms facing Grove Street are Shops and Sewing rooms. The Auditorium is protected by a broad lobby facing the street.

The building is so planned that there are eight exterior entrances, ample and convenient circulation and six stairways. The toilet and locker facilities are conveniently distributed, the departments well grouped, and the administration centrally located.

A fully equipped cafeteria and teachers' lunch room are provided in a central location adjoining the athletic fields.

These athletic fields are located in the rear of the main building with separate fields for boys and girls. The gymnasium is located back of the fields on the piece of ground extending to Dover Street.

This school is unique in its organization and character. Although located in an Oakland school building and constituting a part of the Oakland School Department, yet it is a practice school for the University of California pedagogical department, by whom it is conducted. The classes are kept small and are presided over both by regular trained teachers and by student teachers. The teaching force is proportionately large and it was necessary to provide separate accommodations for each class of teachers and supervi-
sorial offices for trained teachers adjoining each regular class room.

It will be noted that there are two sizes of class rooms. Each accommodates twenty pupils but one-half are for those of junior high school age (7th, 8th and 9th grades) seated at desks, while the smaller rooms are for senior high school grades (10th, 11th, and 12th) seated in tablet-arm chairs.

As this is a six-year high school accommodating all grades from the 7th to the 12th inclusive, it has been so planned that the junior high school and senior high school pupils shall be kept separate as far as possible.

The University High School is essentially an academic high school and hence the shops are minimized, while other departments such as science are very much emphasized. This emphasis is applied to all academic subjects.

Some early studies for this school showing a building with a great court facing Grove Street are also shown herewith.

*Alexander Hamilton Junior High School*

Mr. Washington J. Miller is the associate architect on this school, which will accommodate 1200 pupils of the 7th, 8th and 9th grades.

It will stand on an irregular seven acre
piece of land located on the west side of 35th Avenue opposite Galindo Street being a few blocks above the Foothill Boulevard. The land slopes slightly toward the south.

The school will consist of a more or less closely connected group of buildings so arranged as to allow ample space for the boys and girls athletic fields separated by the gymnasium.

The main administrative and class room unit will be two stories in height located on the upper side of the lot and facing the boys' field to the south. To the eastward adjoining 35th Avenue will be an auditorium seating 1300. To the west will be a one story building for cafeteria, teachers' lunch room, cooking classes and drawing. To the rear will be a centrally located library flanked by interior study courts similar to those in the University High School. Facing these courts on the rear will be study halls and class rooms while back of these will be the shops. The gymnasium is located in the southwest corner of the grounds.

There is ample and convenient circulation, ample toilets and locker rooms conveniently distributed and a central administrative department.

This will be the first large junior high school erected in Oakland and, as such, it has been given most special study by the pedagogical department.
Bay School

Mr. W. H. Ratcliff, Jr., is the associate architect on this school.

It is a Neighborhood School accommodating 800 pupils of all grades from the Kindergarten to the 9th grade inclusive, and is thus a combination of elementary and junior high school which makes it a particularly interesting problem.

The design submitted herewith contemplates the use of the present school building as a part of the new structure. This feature may be abandoned in which case the design will be revised.

The school will stand on the same block of land as the present school on the east side of San Pablo Avenue between 62nd and 63rd Streets and extending through to Herzog Street. The land is nearly level, and the building is placed well at the rear to avoid the noise from San Pablo Avenue.

The main building is two stories with a rear court and a one-story building back of same for the Kindergarten and primary departments, and the junior high school shops.

The administration is centrally located, and grouped around it are the primary, elementary and junior high school departments, so arranged that they can be kept separate with separate entrances, separate toilets, separate covered play spaces and separate yards. The interior court will serve as a charming play yard for the kindergarten and primary children.

The Assembly Hall is located on 62nd Street in such a way that it can be conveniently entered from the street or from the school.

Vocational High School

Mr. John J. Donovan is the Associate Architect on this school.
As its name suggests, it is essentially a vocational school, although well rounded courses are given equal to any high school. The vocational elements however, such as shops, sewing, millinery, cooking, drawing, commercial work, etc., are very much emphasized.

The school building is to be located on two level blocks each 250 feet by 528 feet, separated by Filbert Street, bounded on the north and south by 28th and 26th Streets, and on the east and west by Myrtle and Linden Streets.

The main building consists of a two-story structure located on Myrtle Street and facing east with an auditorium seating 1000 persons, at one end and with a shop building 80 feet by 415 feet facing Filbert Street in the rear. The gymnasium will be on the other block next to Linden Street and will serve the boys and girls athletic fields which occupy the remaining portions of that block. Future additions can be made in the space separating the main building from the shops, and also at the ends of the shop building. The school is at present planned to accommodate 900 pupils in highly specialized courses.

The shops are particularly worthy of no-
tice. They will include a cabinet shop, electrical shop, two auto shops, two machine shops, forge and weld shop, composing room, press room, and electrical and mechanical laboratories, while close at hand will be an extensive drawing department. These shops which cover nearly an acre will be equipped with modern machinery valued at a quarter of a million dollars and will be among the most complete and best equipped shops in the country.

**Garfield School**

Mr. Harris Allen is the Associate Architect on this school. The building will consist of a combination Auditorium-Gymnasium and Shops, which is a neighborhood school similar to the Bay School. It is located on the west side of 23rd Avenue between East 16th Street and East 17th Street.

The Auditorium will seat 750 of whom 210 will be in permanent seats raised in tiers like an amphitheatre and 540 will be in movable seats which can be quickly loaded on special trucks and run under the stage, so that the level floor can be cleared for gymnasium use. This level floor is 50 feet by 75 feet and hence large enough for championship basketball games.

An ample stage is provided with good wings and with flanking three storied pavilions for dressing rooms and showers. The shops are located on the lower side of the building under the gallery seats.

**Elmhurst Junior High School**

Mr. L. S. Stone is the Associate Architect on this school.

It is to be located on land adjoining the present Elmhurst School on the east side of Jones Avenue a few blocks below the Foothill Boulevard.

The present structure will form about one-third of the completed building and will contain administration, class rooms, drawing, sewing, library, lecture room, and shops, as well as toilets for boys and girls. The old building will be continued in use for the present as a part of the school.

An interesting feature in the completed building will be the combination Auditorium-Gymnasium. This is a similar scheme to that for the Garfield School but worked out on a much larger scale. The stage itself will form the girls' gymnasium while the level portion of the auditorium floor will form the boys' gymnasium. The stepped seats and balcony will seat 800 while the movable seats on the level floor will seat 400. It will thus be possible to seat 800 without setting up the temporary seats or 1200 may be seated to watch a basket ball game or other athletic contests on the stage. This large stage will also be useful for large chorus and other exercises. Extensive bathing
OAKLAND, CALIFORNIA

PLANS OF BAY SCHOOL

C. W. Dickey, Supervising Architect
W. H. Ratcliff, Jr., Associate Architect
PLANS OF ELMHURST JUNIOR HIGH SCHOOL

OAKLAND, CALIFORNIA

C. W. Dickey, Supervising Architect
L. S. Stone, Associate Architect
Details of entrances, Vocational High School
Oakland, California
C. W. Dickey, Supervising Architect
J. J. Donovan, Associate Architect
ROCKRIDGE ELEMENTARY SCHOOL

OAKLAND, CALIFORNIA

C. W. DICKEY, SUPERVISING ARCHITECT
MILLER AND WARNECKE, ASSOCIATE ARCHITECTS
OAKLAND, CALIFORNIA

GARFIELD AUDITORIUM-GYMNASIUM

C. W. Dickey, Supervising Architect
Harris Allen, Associate Architect
WEISER ELEMENTARY SCHOOL (FIRST UNIT)

OAKLAND, CALIFORNIA

C. W. Dickey, Supervising Architect

C. W. McCall, Associate Architect
PERALTA ELEMENTARY SCHOOL
ALCATRAZ AVENUE AND NORTH STREET
OAKLAND, CALIFORNIA

OAKLAND, CALIFORNIA
PERALTA ELEMENTARY SCHOOL
C. W. DICKY, SUPERVISING ARCHITECT
facilities and other gymnasium accessories are arranged in one story wings on both sides of the auditorium.

When completed, this school will accommodate 1200 pupils.

**Elementary Schools**

Most of the elementary schools shown here-with are planned for future growth. In some cases, such as the Stonehurst and Webster Schools, the present building is only a small part of the future structure.

Where plenty of land is available for play yards, the schools are only one story in height, but where the land is limited they are made two stories in height but without basements. The covered play spaces are provided for in one-story sheds adjoining the toilets.

In most cases the assembly halls are to form a part of the future additions, but in the Stonehurst school it is a part of the first unit.

The kindergarten and first grade rooms are in all cases made a special feature.

The Dewey school consists of the old wooden building remodelled and modernized by the removal of the exterior excrescences such as towers, dormers, etc., and covering the walls with cement stucco. To this is connected the new wing with four class rooms and a kindergarten. The connecting link consists of a covered corridor on one side of which is the new principal's suite.

In the Peralta school an interesting auditorium is formed by combining two class rooms, a corridor and a teachers' lunch room by means of folding partitions. The lunch room is elevated and forms the stage.

The associate architects for these elementary schools are as follows:

Stonehurst school, H. G. Simpson; Webster school, C. W. McCall; Rockridge school, Miller & Warnecke. The Peralta and Dewey schools were entirely the work of the construction department of the Oakland Public Schools.
THE WASHINGTON STATE CAPITOL*

By CHAS. H. BEBB, F. A. I. A.

Down through all ages from the remotest antiquity to the present time the material and intellectual forces of all nations of the world that have attained to civilization have expressed themselves in the architecture of their buildings. And the higher the civilization, the more equal and harmonious the development of all the faculties of the human mind, the more splendid restrained and dignified has been the expression recorded in these buildings.

It was in those great days when the Colonies were made into a nation that the problem of properly housing the state and national governments first presented itself—what was the spirit behind it and how was it met? Exalted and fervent patriotism was in the minds and hearts of those great colonial gentlemen. This was the inspiration that bequeathed to the nation the White House, the national capitol, the state house in Boston, Portsmouth, Newport and Richmond, the University of Virginia and many other fine buildings of non public nature.

In looking back, therefore, we find that Republicanism and Democracy and the government of the people was conceived in the mind in veneration and expressed in indelible form in buildings that were noble and beautiful in art. The seed of American tradition was planted, American ideals, American inspiration, and the names of L'Enfant, Thornton Hallet, Hadfield and Bulfinch will go down in history as the architects of that period who expressed in consummate form in space those ideals.

In exactly one hundred years from the meeting of the first Congress of the United States under the constitution or in the year 1889, Congress admitted the forty-second state into the union, the Territory of Washington was advanced to statehood. The state constitution was adopted by the people, was

*Courtesy of Pacific Builder and Engineer.
SCHOOL LANDSCAPE GARDENING

By Howard Gilkey*

In their architectural program for the schools of Oakland, the supervising architect and the chief of construction have had in mind the finished school building with an adequate landscape setting. With this thought, they have economically refrained from elaborate ornamentation of exterior walls, except at important openings, counting upon the planting to add the decorative charm.

In conformity with this ideal, the buildings are set back as far as practicable to insure quiet and ample room for lawns and planting, while the fences about the playgrounds are placed a few feet back from the sidewalk or property line to allow for vines to grow and for masses of bright flowering shrubs to enliven the border plantation which serves to give privacy to the playground.

Most playgrounds present a bare appearance which can be obviated by placing trees on the lines separating the units of recreational area.

The architect secures an expression of unity by making his main entrance and often a bay of the building contiguous with it, dominant over the rest of the structure by its superior size or height or by elaboration of detail. He seeks to draw attention to the dominant feature first. In like manner all planting should serve to accentuate this effect. Emphasis in planting is secured by the introduction of contrasting elements either in silhouette, texture, or color. The silhouette

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*City of Oakland Landscape Engineer.
of the main mass of the planting should be of soft undulating lines, emphasis being attained by the sparing introduction of strong verticalities such as the Italian Cypress and the Irish Yew. Likewise the texture of the foliage masses is made homogeneous, accenting salient points by the contrast of bolder leaf forms such as the aralia and the acanthus. In much the same way we must rely upon our wide variety of evergreen shrubs for our color background, enlivening the composition at the selected points by the bright color of flowers or berries used, preferably in a single mass of color or in a studied balance of two or three colors.

Where the emphasis of the planting design accentuates the architectural emphasis of the building, the unity of the whole is preserved. Nothing serves better to preserve the unity and simplicity of the school and its setting than an unobstructed front lawn which is kept open and free from flower beds.

Base planting is the effective means of securing the transition between the lines of the building and the ground. On account of their adaptability and ease of upkeep, evergreen flowering shrubs should comprise the main mass of the parking, so selected as to provide a succession of color at all seasons, especially during the months when school is in session.

The problem of color composition in Oakland is simplified, since the buildings are to have a cement finish of warm gray, forming a neutral background against which color may be freely used. With the completion of the building program, Oakland will have structures of dignified architecture and adequate playgrounds in a setting of landscape charm.

(Continued From Page 70)

approved by Congress and President Harrison issued the proclamation announcing the fact. At the same time there was granted to the new state a land grant of 132,000 acres of public land, the sale of which was to apply solely for public buildings at the state capitol.

The first move looking towards the building of a state capitol was in 1893 when the state legislature passed "An Act to provide for the location and erection of a capitol building and providing an appropriation therefor, and declaring an emergency. The first meeting of the state capitol commission with Governor J. H. McGraw as chairman was held July 26th, 1893. At this meeting there was authorized a notice to architects calling for competitive designs for a proposed capitol building and a program was formulated by the commission. On the final day set for the reception of competitive plans, December 14, 1893, one hundred and eighty sets of drawings had been sent in. They were judged by Professor Wm. R. Ware of Columbia College. The award fell to Mr. Ernest Flagg of New York City and in May, 1894, he was commissioned to proceed with the final drawings. The drawings for the foundation and basement of the capitol building reached Olympia in September, and on November 8th the contract for the construction of this work was awarded to Moffat Bros. of Spokane. Subsequently the completed drawings reached Olympia and bids were received by the commission for the structure. The lowest bids exceeded one million dollars and all bids were rejected. In view of the stringent times and the economic conditions throughout the country, and from the fact that the selection and appraisal of the lands granted by Congress had not been completed, it was deemed advisable to postpone construction to a future period.

In the following state election Governor McGraw was succeeded by Governor Rogers. Governor Rogers was not in sympathy with the building of the proposed state capitol building, but the demand for offices and quarters for state officials had become imperative and some action had to be taken. So it was decided to purchase the Thurston county court house and add a wing to it, which the governor stated would care for the needs of the state for a hundred years. Provision, however, was not Governor Rogers' highest qualification, and in a short space of time it was found that the accommodations were entirely inadequate. Nothing, however,
was done until 1909 when the legislature passed an act providing for the erection and completion of a capitol building. This act was found to be defective by the supreme court and was amended by an act of the legislature approved March 13th, 1911. It is under the provisions of this act that the present group plan of buildings is developing.

At the first meeting of the state capitol commission in 1911 under Governor M. E. Hay's administration, an exhaustive discussion ensued on state capitol requirements looking to the future as well as to the present. The fact had become pertinent that no single building could possibly house these growing requirements, consequently a grouping system of buildings was decided upon, and it was resolved that a competition among architects of the United States should be created calling for grouping plans and plans and a design for the Temple of Justice. The commission employed a professional adviser and a carefully drawn program for the competition was prepared and adopted. On July 27, 1911, thirty-three sets of drawings were submitted. They were judged by a jury of three architects selected by the commission, and the award fell to the firm of Wilder & White of New York. As soon as notified, these gentlemen came to Olympia to make personal study on the ground of all the local conditions. They were given six months in which to prepare and submit the final drawings for the group plan. When these drawings reached Olympia three days were spent by the entire state capitol commission in study and critical analysis of them and they were finally unanimously approved and adopted as the Group System of Buildings for the state.

In proceeding with the drawings for the Temple of Justice, a serious condition confronted the commission. The act had provided a sum of money wholly and entirely inadequate for the purpose. After due deliberation it was decided that the work should proceed only as far as the money authorized would permit, provided, however, that it was sufficient to put the building in such condition that the supreme court, attorney general and law library could be moved into it. The architects were instructed to make their plans accordingly, and in 1912 the first section of the building, a body without a skin, was completed at a cost within the appropriation. The
legislatures of 1913 and 1915 did not see fit to appropriate funds to complete the building. In 1917 enough funds were appropriated to complete the stone facing and finish the interior and the building was accepted for the state by Governor Hart in 1920.

The legislature of 1919 appropriated sufficient funds for the construction of the first office building in the group system to be known as the Insurance building. This building is now practically completed. By reason of the enactment of the Governor's Code Bill, House Bill No. 11, passed at the last session of the legislature, and for reasons of efficiency and economy in government administration, sundry changes are being completed in the interior arrangement to permit its temporary occupancy by the elective officers of the state until such time as the main legislative building is erected. And this is the next building on the program. What shall this building and the buildings surrounding it express to the people? Shall this group express the dignity and majesty of our government, shall it be the evidence of our intelligence and refinement and our justifiable pride in the importance of our state, named after the father of his country. As with unerring judgment he approved the plans of L'Enfant for the Federal Capitol, would he approve this group system for the state named after him? Even as the city of Washington is in its beauty and splendor the finest city in the United States, if not in the world, so should our group of government buildings be the finest of any state in the Union. We are creating them now that we may leave to the generations that come after us the expression of our patriotism, our aspirations and ideals. And the cost is the gift of the nation. Every dollar of the indebtedness incurred will be returned when the Capitol Grant Lands are sold and their sound value as of today is estimated at over eight millions of dollars.

COMPETITION TO SELECT ARCHITECT FOR LIBRARY

A competition will be held to select an architect for the Los Angeles public library building and branch libraries to be erected under the $2,500,000 bond issue recently voted. The library board asked the city council for authority to appoint an architect direct. This request was denied and an architectural competition was recommended by council. The library board will have charge of the competition. The manner in which it will be conducted has not been determined but the board will probably take up the matter very soon.

A THEATER FOR EVERY CLASSROOM

Walter Storey, Director of Exhibits of the American Red Cross, has completed some work which suggests a new architectural feature for the modern school building. This is the day of visual education, when the teacher tries to visualize her instruction to the pupil. To make this easier, Mr. Storey says, doll theaters could be built into every classroom. These theaters can be built small enough to use pictures from the rotogravure section of the newspaper for scenery, while groups of characters can be cut from photographs and mounted on cardboard for the "caste" and to provide action for the educational play.

Mr. Storey made a series of such miniature theaters for the Red Cross Convention at Columbia in October, to visualize Red Cross lessons in First Aid. For his first model he used a pasteboard box, cutting the cover into an arched framework for the stage and bending the bottom of the box semi-cylindrically for the back of the theater. A floor was constructed of more pasteboard. The pictures for scenery and caste were slipped in and out through the open top and were easily adjustable, so that the theater could stage any number of shows. Red muslin formed an effective curtain and mirrors proved perfect footlights, reflecting the rays of the electric light bulb which had been placed in the opening at the top. Larger, or more durable, models of Mr. Storey's educational doll theater may be built from wood or from beaver board, while photographs can be proportionately enlarged for scenery and caste.

These theaters were constructed by Mr. Storey to visualize some of the work of the American Red Cross. But the same idea, it is believed, would prove practical in the school. The cost of building such a theater would be small. It could be erected at the front of the classroom and such pictures could be selected for the "show" that Johnny would actually see, as well as hear, his lessons in geography, history and hygiene.

The Red Cross, to hold its Fifth Membership Roll Call November 11-24, has formed a peace program which provides service to disabled soldiers; disaster relief; promotion of public health; and aid for European war orphans.

Architect G. F. Ashley, First National Bank Building, Oakland, requests catalogues and samples from firms in the west or who have agents or representatives here.
INDUSTRIAL EXPOSITION
NOVEMBER 9 TO DECEMBER 10

The Central Bureau of San Francisco organizations recently announced that the date set for the Industrial and Civic Exposition is November 9th to December 10th in the Civic Auditorium. It was only through the loyal San Francisco spirit of two large organizations which had engaged the auditorium for dates in November that the Central Bureau was able to obtain the auditorium for the exposition which forms a vital part of the San Francisco program of Dr. B. M. Rastall, industrial engineer for the San Francisco Chamber of Commerce.

The two organizations which gave way and postponed their dates were the Native Sons of the Golden West, which had planned to hold a bazaar in November for homeless children and the Mystic Shriners, who had chosen a date in the same month for their annual ball. Both recognizing the essential importance of the exposition to San Francisco's advancement waived their prior rights to the use of the auditorium so that the exposition might have four clear weeks for its educational purposes.

Competitive plans are being prepared by five San Francisco architects for the development of the site for the new Masonic Home of California at Decoto, Alameda County. One building of the group will be erected immediately and will cost in the neighborhood of $200,000.

The competition will close about October 6th. The following is a list of the architects participating:


Architect Sylvain Schnittacher, 233 Post St., San Francisco, has been selected as official adviser.

Architect V. O. Wallingford of Phoenix, Arizona, has moved into new and larger offices at 310 Heard Building. He writes us that business is good in that territory and is showing improvement.

Architect F. H. Weeks who has been at 75 Post Street for many years has moved to new quarters at 369 Pine Street, San Francisco.

Architect H. B. Dunn, 6665 Hollywood Boulevard, Los Angeles, has opened a branch at 257 E. Colorado Street, Pasadena.


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WASHINGTON STATE CHAPTER AMERICAN INSTITUTE OF ARCHITECTS

The first regular Chapter meeting of the season will be held at Pig’n Whistle, 1009 Second Avenue, Thursday, October 6th. Dinner, 6 P. M. Meeting immediately thereafter. Price of dinner, $1.00.

This is an important meeting and members should make a special effort to attend. Special questions that will come before the Chapter for action are as follows:

1. The Chapter’s position regarding a proposed amendment to the By-Laws of the Institute reducing the number of delegates to the Conventions. As the By-Laws now read, each Chapter is entitled to two delegates plus one additional for each ten Institute members, distant Chapters being allowed proxies if one-half of its delegation is present. With the increased size of the Institute a reduction in the representation has appeared desirable in the interests of economy and to prevent the Conventions becoming too unwieldy. The Chapter will have on this proposal, the recommendations of its Executive Committee and its Committee on Institute Affairs.

2. The Chapter should decide at this meeting whether they desire to have an exhibition during the coming season. The Exhibition Committee reported at the last Annual Meeting that an exhibition was recommended every two years. That appears to call for an exhibition next spring. The Chapter should decide this early so that necessary preliminary arrangements can be made.

As a special feature of the meeting Mr. Jesse A. Jackson, Engineer of the Seattle Zoning Commission, will explain the work of the Commission to date, showing the various study maps prepared for the Commission’s use, such as automobile and pedestrian traffic, assessed valuations, existing building use, height and area conditions, etc. The Commission has been steadily at work and will soon have a final zoning ordinance in preparation.

Zoning is a subject with which the Chapter has been actively interested and it should welcome this opportunity to hear what the Seattle Commission has accomplished and give it continued support and co-operation.

SAN FRANCISCO CHAPTER, AMERICAN INSTITUTE OF ARCHITECTS

A Regular meeting of the San Francisco Chapter, American Institute of Architects, was held on Thursday evening, September 15th, 1921, in the Architectural Club Rooms.


Minutes

Minutes of the Special Meetings held on August 9th and September 6th, were read and approved.

Committee Reports

Committee on Legislation reported that the so-called ‘Bumert Housing Act,’ which was to go into effect September 1, 1921, has become inoperative by filing of a referendum petition and that the laws of 1917 will continue to be enforced.

The Nominating Committee reports as follows:

"Your Committee appointed to nominate an Official Ticket of Officers to serve the San Francisco Chapter of the American Institute of Architects for the coming year, begs to report as follows:

"President: Geo. A. Applegarth; Vice-President, Ernest Coxhead; Secretary and Treasurer, J. S. Fairweather.

"To new members for the Board of Directors: Harris Allen, Henry H. Meyers.

Respectfully submitted,

Arthur Brown, August Headman, Morris M. Bruce, S. Schmittacher, W. B. Faville, Chairman."

New Business

Moved and carried that the Chapter endorse the Directors’ stand in resigning the sustaining membership in the California Headquarters Building Institute, and that other sustaining members who had joined at the insistence of the San Francisco Chapter be notified of our stand.

Moved and carried that it was the opinion of the San Francisco Building Chapter that the Conventions of the Annual Convention be restricted to a smaller number.

Moved and carried that the findings of the Judiciary Committee in regard to the Don Lee case be received and placed on file.

Moved and carried that the Chapter extend an invitation through Chief Murphy to the International Association of Fire Engineers to hold their convention in San Francisco for 1922.

Mr. Frederick Whitton addressed the meeting in regard to the benefits of the B-B Fund.

Moved and carried that the chair appoint a Committee to see if some action cannot be taken in regard to raising funds for the B-B Campaign.

There being no further business the meeting adjourned.

J. S. Fairweather, Secretary.

Statement of the Ownership, Management, Circulation, etc., Required by the Act of Congress of August 24, 1912,

Of The Building Review, published monthly at San Francisco, California, for October, 1921, State of California, County of San Francisco.

Before me, C. B. Sessions, Notary Public, in and for the State and county aforesaid, personally appeared, E. D. McDonald, 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 of the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 48 of Postal Laws and Regulations, printed on the reverse of this form, viz:

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

   Publisher, Building Review Company, 410 Hobart Bldg., San Francisco.

   Editors, Harris Allen and Henry H. Gutterson.

   Managing Editor, none.

   Business Manager, E. D. McDonald, 410 Hobart Bldg., San Francisco.

2. That the owners are: (Gives 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.

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

   E. D. McDonald, 410 Hobart Bldg., San Francisco.

   J. A. Drummond, 209 28th Avenue, 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 none are so, state.) None.

   Sworn to and subscribed before me this 5th day of September, 1921.

C. B. SESSIONS,

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## The BUILDING REVIEW

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A Decade in the Office of Myron Hunt, Architect

By Irene McNeal Swasey

In order to give a really adequate idea of the work of the office of Myron Hunt, architect, during the past ten years, it would be necessary to break an hitherto invariable rule—and show, in addition to work completed, certain tremendously interesting projects for which plans have been prepared, but which are not yet under construction. In the case of Public Buildings particularly, it would be of distinct educational value in this history-making period of a rapidly growing city; for, if it be true that “Architecture is the expression of the psychology of a people, a record of their thoughts, tastes, even their hopes and dreams,” then surely no opportunity should be lost by the leaders in a community, to give the people at large the benefit of their special knowledge and training. However, in spite of my plea, the office rule stands, and only finished work and work under construction is shown.

The buildings illustrated in this article represent a somewhat indiscriminate selection—the idea being to give a general impression of the character and variety of work, and the
width of range and perhaps unusual opportunities offered to Mr. Hunt and his associates.

The earliest building in point of time, is the Spanish Colonial Church at Riverside (The First Congregational Church); which was dedicated January 25th, 1914. This, as it happens, was the first church problem presented to this office, and it is commonly referred to by Mr. Hunt as "The Church," a further unique distinction being that it is the only competition into which the office has ever entered. This competition was won just prior to the dissolution of Mr. Hunt's partnership with Mr. Elmer Grey. Associated with Mr. Hunt for the past twelve years, Mr. H. C. Chambers has recently been made a partner in the firm, a matter of mutual congratulation. He adds to a keen appreciation of beauty in all its phases, the ability to express himself architecturally with dignity and restraint, the essence of good taste.

The Occidental College group is illustrated by one plate, as space does not permit the showing of the campus plan, involving the present and future development of the ninety acres in Eagle Rock Valley owned by this institution. Plans are now under way for the president's mansion and the girls' gymnasium, and a comprehensive planting scheme is being carried out under the direction of the architect.

The entrance doorway of the music building of Pomona College, Claremont, gives an idea of the note which Mr. Hunt has established for the development of this college designed and erected previous to this time, are not here included. They are the joint work of Mr. Hunt and Mr. Grey.
THE BUILDING REVIEW

THE WILLIAM G. MATHER GARDEN
SAN RAFAEL HEIGHTS, PASADENA, CALIFORNIA

MYRON HUNT, Architect.

The music building, which was the gift of Mr. and Mrs. A. S. Bridges of San Diego, is known as Mabel Bridges Hall in memory of their daughter. It includes an auditorium seating one thousand people, with a stage large enough to hold a complete symphony orchestra, and in addition, the necessary practice rooms and music studios for the use of the School of Music at Pomona, which is housed in the building. In connection with Mabel Bridges Hall it is interesting to show the pool in the patio. The little bronze figure is the work of Burt Johnson, sculptor, a pupil and relative of the late Augustus St. Gaudens, who was himself a Pomona College student.

St. Ann's Inn at Santa Ana, recently completed, is a California rendering of a New England roadside inn. The illustration is not from a photograph, but a remarkable perspective sketch drawn by the late Walter E. Rice. The old cypress trees and palms are shown as they really exist, for this building was erected on the site of one of the oldest residences in Santa Ana, and the fine old planting was not disturbed. Even the quaint stucco and white painted iron paling across the front of the property has been retained.

The central courtyard of the Riverside Mission Inn, used most of the year as an outside dining room for the hotel, was finished by Mr. Hunt shortly before the World War. To quote from a description by Mr. D. C. Allison, "The striking contrast of large openings and small ones, broad wall surfaces and fine texture, relieved by large wall decorations in fresco, sculptural ornaments and iron grilles, have contributed to make one of the most charming courtyards in America."

The space available for reproduction being limited, the buildings pictured can not be completely illustrated, and necessarily a number of important ones are not shown at all, among them the Huntington Hotel at Oak Knoll, Pasadena, which Mr. Hunt completed; the Bard residence at Hueneme; the Elks Club House, Pasadena; and the Hotel Maryland Bungalows, Pasadena. In passing it might be of interest to remark that the bungalow court
idea, which has become so popular in Southern California, perhaps had its inception at the Maryland Hotel where a system of bungalows was developed, grouped about a large central lawn looked out upon from the main lobby of the hotel, and connected with the hotel proper by miles, seemingly, of gay red and white canvas covered walks.

The recently completed Los Angeles Ambassador Hotel is at the present time a difficult subject for the photographer. This building was erected upon twenty-one acres of rolling land in the middle of the city of Los Angeles. The site had represented such difficulties to the real estate subdivider that the westward flow of the growth of the city had completely surrounded it, and until the time that ground was broken for the Ambassador Hotel, it lay absolutely untouched. A complete landscape scheme has been evolved by Mr. Hunt, and executed by Howard and Smith, landscape architects, and a large sum of money has already been spent in planting. However, the complete transformation of a bare twenty-one acre pasture into a semi-tropical garden takes longer, even in California, than the six months which have elapsed since the completion of this work, and it will be some time before this resort hotel in the center of a large city will have its adequate setting of trees and gardens. The plate showing a view of the hotel from one of the pergolas will, however, give an idea of its appearance at the present time.

The Ambassador Hotel is almost a municipality in itself, as in connection with the hotel of some 500 rooms, there is a branch bank; a United States branch postoffice; numerous smart shops selling everything from automobiles to confectionery; a theater; a public garage; and also some half dozen bungalows connected with the main building by vine covered pergolas, which are the forerunners of an extensive bungalow system to be operated in connection with the hotel, that will ultimately extend over the entire property.

This building was erected during the unsettled labor conditions following the war, and as it was the first building project of great magnitude to be successfully launched in Los Angeles after the signing of the Armistice, practically every administrative problem that can arrive in the course of the construction of a large building had to be met and solved.

The difficulties of bringing to completion simultaneously a main building, bungalows, garages, servants' dormitories, pergolas and the many acres of lawn and planting in time to make the whole appear complete at the beginning of the winter tourist season were apparent to the merest lay-man, and the opening of the hotel on the date scheduled was not only in the nature of a surprise to the entire community, but a great tribute to the administrative efficiency of Mr. Hunt's office. The theater was not contemplated in the original scheme. To provide a completely equipped theater suitable both for motion pictures and for little plays, with adequate foyer and waiting rooms, that would be an integral part of the hotel, entered only from the shop arcade, must have presented the architect with a problem worth while! Its present use as part time "movie" and a home for the Green Room Club is assisting the Ambassador to rapidly take its place as the logical center of artistic and social activities in Los Angeles.

This hotel has its own 150 acre golf course just west of the city, where Mr. Hunt has designed and built a ranch house type of golf club, of which unfortunately no illustrations are available at this time.
RIVERSIDE, CALIFORNIA

The Flintridge Country Club, located in the picturesque La Canada Valley just north of Pasadena, is of the type of California Mission architecture, and its simple roof lines and sober succession of pillars form a wonderful contrast to the mountain background. It perhaps recalls the Mission of La Purisima Concepcion, north of Santa Barbara (now almost totally in ruins), more than any other of the old Spanish Missions.

The walls are of concrete cast against metal forms. They consist of an inner and an outer wall with an air space between. No furring is necessary on account of this wide air space, and the texture of the walls is simply the concrete as it comes from the forms, whitewashed outside, and painted inside. The roof is terracotta tile, and the floors are terrazzo of a leather brown color.

The interiors are extremely simple and restful, and have been most successfully furnished and decorated by Mr. Edgar Cheesewright of Pasadena, interior decorator.

To quote John Taylor Boyd, Jr., who has...
written of the Flintridge Country Club:

"Although very original, the Flintridge Country Club is not theatrical. It is an absolutely honest design, in keeping with the spirit of the region. There is nothing forced about its simplicity, and in this it is a worthy example of Southwest Coast country architecture. In the East, the Philadelphia architects lead all others in just this ability to create country architecture in a simple, un-self-conscious way. They, too, design in the spirit of their region. This is true craftsmanship and real architecture, and it is good to see it arising on the Pacific Coast, not imitatively, but in the fresh, original inspiration characteristic of California."

The County National Bank and Trust Company's building at Santa Barbara is represented by one view of the interior, and by the preliminary sketch of the State Street front. This structure is undoubtedly familiar to the readers of the Building Review as it has been published recently with a most delightful descriptive article by Mr. Irving Morrow, who lays special stress upon "the exceptional felicity and distinction of the proportions or inter-relations of length, breadth, and height," adding that "the ability to produce such effects is one of the surest tests of a realistic

and creative architectural imagination."

The source of inspiration for this building may also properly be referred to the Mission Fathers, although the design indicates the use of classical forms as employed in Italy and Spain following the Renaissance. The love of gardens and outdoor life has even affected the policy of a Board of Directors of a Bank in this instance, and one of the initial requirements was that somehow the feeling of outdoors with shrubbery and flowers should be brought into the interior. The long windows to the south of the bank open out on a narrow planting space back of a high wrought iron fence on Carrillo Street (the side street), and when this planting has attained its growth the bank officials will have accomplished their wish of having a bank suggesting the lovely flowers and gardens of Montecito and Santa Barbara. The floor of the main banking room is Napoleon gray marble, with a base of black and gold marble. The wood work of the counters and of the furniture is oak, stained to a dark weathered appearance, and with the surface waxed and rubbed. The cage grilles are wrought iron. The walls and columns of the interior are of stucco of a rather warm tone and with a very pleasing texture. The ceiling of the main banking room is thirty-six feet above the floor, of California redwood

GARDEN OF THE LORING RESIDENCE
San Rafael Heights, Pasadena, California

GARDEN OF MYRON HUNT, ARCHITECT
PASADENA, CALIFORNIA
GOLF PROFESSIONAL HOUSE, FLINTRIDGE COUNTRY CLUB

FLINTRIDGE COUNTRY CLUB
NEAR PASADENA, CALIFORNIA

MYRON HUNT, ARCHITECT.
FOWLER HALL, OCCIDENTAL COLLEGE

JAMES SUCUR HALL, OCCIDENTAL COLLEGE
LOS ANGELES, CALIFORNIA

MYRON HUNT, ARCHITECT.
FIRST CONGREGATIONAL CHURCH
RIVERSIDE, CALIFORNIA
MYRON HUNT, ARCHITECT.
INTERIOR OF COUNTY NATIONAL BANK AND TRUST CO.
SANTA BARBARA, CALIFORNIA

MYRON HUNT, ARCHITECT.
Preliminary Sketch of County National Bank and Trust Co., Santa Barbara, California

Myron Hunt, Architect.

The Mabel Bridges Hall of Music, Pomona College, Pomona, California

Myron Hunt, Architect.
THE CHAPEL, THE MAJOR J. H. H. PESHINE RESIDENCE
SANTA BARBARA, CALIFORNIA

MYRON HUNT, ARCHITECT.
ENTRANCE FACADE, THE MAJOR J. H. H. PESHINE RESIDENCE
SANTA BARBARA, CALIFORNIA

MYRON HUNT, ARCHITECT.

RESIDENCE OF MRS. E. M. FOWLER
CHINO, CALIFORNIA

MYRON HUNT, ARCHITECT.
stained brown. The exterior is plastered with stucco somewhat similar in color to the interior, and the columns and base course are terra cotta. The roof is of burned clay tile, and corresponds with that of an historic abode building which joins the bank on the east, and forms, with the bank, practically one group of buildings. This unusual bank has achieved an undoubted artistic success, and is also said to be very successful from a business standpoint, and even from a business getting standpoint. The architect has already received instructions to enlarge certain portions of the working space, which at the time the bank was planned were considered by the officials to be ample for all future growth. To quote again from Mr. Morrow:

"It is an uncommonly perfect thing, free from that frigidity or aloofness which is popularly associated with a high degree of formal perfection."

In this cross sectional view of ten years' work, we now come to residences and gardens, of which only a few examples can be shown.

The garden of the residence of John P. Wilson of Pasadena, of which one view is given, was designed with the idea of presenting to an owner, who resides in his California house a few months only, in the winter season, a profusion of flowers, and the planting has been so arranged that during this time the somber hedges and surrounding eucalyptus and evergreen trees serve as the frame work and background for a marvelous display of flowering plants.

Mr. Hunt's own garden is a different type. It is a small formal garden with a fine background of giant cypress trees, and a massed foreground of wisteria and heliotrope, with border planting of seasonal flowers. While the actual extent of ground is quite limited, an appearance of both space and depth has been achieved. The little garden figure is by Maud Daggett, sculptor, of Pasadena.

The beautiful natural setting of the Major J. H. H. Peshine residence of Santa Barbara is shown by the reproduction of the architect's preliminary sketch for this house. It was built on land belonging to Mrs. Peshine's father, who planted the ancient olive trees which form part of the garden scheme. The hillside back of the house is covered with scrub oak, and forms a green background to the white walls and red roofs of the villa. This is by way of being a luxury, as most of the hillsides of Southern California turn brown during the summer, but we have here the unusual combination of a northeast slope near the sea, and the trees and shrubs retain their green throughout the year.

Two other views of the Peshine residence are shown in the plates, and give a notion of
how closely the finished building corresponds with the architect's sketch.

The Dr. Raymond Mixsell residence in Pasadena with its English feeling has a distinctive English setting of oak trees and massed planting. The garden of this house is an ever changing succession of informal disposition of flowering plants, and is noted for its fine collection of iris.

The garden of Mr. William G. Mather on San Raphael Heights, Pasadena, is located on one of the precipitous hillsides overlooking Pasadena. The photograph shows a series of steps running down this hillside, which suggests Algiers or the slopes of sunny Spain.

The views of the residence of Mrs. E. M. Fowler at the California Junior Republic, near Chino, have not hitherto been published, and show this farm house type of Italian residence with its planting attaining a growth which softens the severeness of the building. One of its interesting features is the outdoor stairway.

The H. E. Huntington Library located in the park surrounding his residence, and built to house his extensive and invaluable collection of books, is now nearing completion. A preliminary study only of this building is here shown, and indicates a simple classical design, with tile roof and white stucco walls, quite in character with the owner's residence which is some hundred yards to the west. Both library and residence overlook a broad expense of orange groves and gardens, and have a beau-
tiful background formed by the Sierra Madre Mountains. The south facade of the library is shown. There are three wings extending northward from this main portion, which house successively, the art gallery, stack room, and administrative offices. When completed the library building will house 200,000 books, including what is said to be the finest collection of English literature outside of the British Museum. To quote from the “Amenities of Book Collecting” by Mr. A. Edward Newton: “It is the greatest private library in the world.”

The wonderful natural beauties of California, its varied landscape settings and year round opportunity for outdoor life, make possible a wide scope of architectural expression. To a man of Mr. Hunt’s temperament and untrammeled personality, this environment has proved an unfailing inspiration. Apart from his knowledge and experience as an architect, he has a flair amounting to genius for gardens and effective landscaping. Always resourceful and original, his work is not only distinctive and distinguished in style, but it possesses in addition that rare, elusive and impalpable quality—charm.
EDITORIAL

An address by Governor Morrison of North Carolina, recently delivered before Textile Workers, seems to us so much to the point in our present local situation that we print extracts from it herewith. The first public hearing of The Industrial Association Wage Board was held November 8th in San Francisco, and although notices were sent to all concerned, no official representation of any union was present. Such an attitude is hard to understand, in view of past events. Strikes can hardly be won without public sympathy, and the public at present is in no mood even to tolerate any action not based on undeniable injustice. It behooves the unions to co-operate whole-heartedly with this board, whose personnel, headed by Archbishop Hanna, is above reproach, if they wish to receive consideration at the court of public opinion. The extracts from Governor Morrison’s speech follow:

“Dearer than our entire industrial fabric and all the wealth we have accumulated is the principle of liberty involved in the right, duly regulated by law, to freely contract and be contracted with about any lawful and moral matter, properly the subject of a contract. It is true that we are our “brother’s keeper,” but I think the time has arrived when we had better recognize more of our brother’s liberty, and permit him to attend to his own business. No man owes anybody an apology in this country for entering into or refraining from entering into any business contract, or refusing to enter into a business contract he may see fit to refuse to enter into,

“There is a wide opinion that public sentiment must jerk up every large employer of labor and by abuse and vilification bring him into contempt when he exercises his undoubted privilege to refuse to enter into a contract which he does not want to enter with his employees. It is his own business, and no man has any right, even those who want to make the contract which the employer in the exercise of his undoubted liberty will not make, to become angry with him, and abuse his and hate him. We are coming upon serious times in this republic, and we had better recur to the primary principles of liberty, and recognize the freedom of contract and respect it. If the mill employers of this city and county will not enter into contracts with union labor, or with the individual laborers concerned, which labor wants them to enter into, it is absolutely nobody’s business but their own.

“If the foregoing statement of principles is not correct, then freedom of contract is destroyed in this republic, and we are no longer free, but under an absurd interpretation of the principle that we are our brother’s keeper we have reached the place that no man can attend to his own business, but must transact it as liberty despising public sentiment, fostered by ignorant leaders, requires him to do. Let us, before it is everlastingly too late, recognize the liberty of each citizen, or group of citizens, as long as they will keep order and respect the peace, to transact their business according to their own sweet will.

“I would be most happy to see a freely arrived at adjustment between conflicting industrial forces, but I am satisfied that settlement arrived at through coercion, governmental or otherwise, or on any basis other than purely economic would not bring permanent understanding. We must go to basic principles about these controversies, and recognize the absolute freedom of individuals or groups of individuals in this state to contract and be contracted with, without coercion by influential public officials, or by intimidating coercive assemblies engaging in insult and intimidation. * * * * * * 

“* * * * * * If all officials, from the highest to the lowest, and the public, will recognize that liberty to contract and be contracted with, or not to contract and be contracted with, is more priceless than any other principle of liberty, except that of life and personal security, and under this principle let conflicting parties to these industrial disputes settle their own difficulties as other people have to do, we will have arrived at a basis which will clear up the whole situation.”
A New Shop in Los Angeles
DESIGNED BY RAY COYLE.

The branch shop for Messrs. I. Magnin & Co., of San Francisco, was established in the Ambassador Hotel, Los Angeles, a little less than a year ago. It occupies space on both the lobby and casino floors, a private stair connecting the two, so that the entire installation is self-contained. The first problem presented was to obtain adequate sales space practically and decoratively arranged, with display windows opening on the hotel lobby. The dominant purpose of the decorative scheme depended on the consideration that the Shop was to be used for the display and sale of feminine garments. The setting for the high grade of merchandise to be displayed necessarily must possess a certain indefinable quality of delicacy and style sufficiently novel to be in itself an attraction to visitors.

The exterior of the Shop is entirely of walnut. On either side of the entrance are two large display windows, without solid backs, so that the interior shop is in plain view, the brilliant but delicate color of which adds to the first impression received.
Above the entrance is a decorative painting, on gold leaf background, with rich color notes harmonizing with the general decorative scheme.

There is a central entrance lobby, from which opens two rooms of subequal size. These three are on the level of the hotel lobby. The main salesroom, however, is above the main level. A connecting stair, with decorative wrought iron standards, adds an important feature to the scheme.

The necessary stockrooms are arranged in conjunction with the intention of saving steps. The office and fitting rooms are also planned for convenience and comfort. The space on the casino floor is utilized for the alteration two large lunettes over-doors, two small lunettes, and two circular wall paintings. A printed linen, of brilliant color and charming design tying together all of the variegated color in these rooms, is used for covering the overstuffed furniture and as insets in the valances of the purple satin hangings.

The furniture and fixtures, specially designed and made in San Francisco, carry out the same feeling of restraint and delicacy necessary to the character of the Shop. Dark walnut and green enameled furniture are used to give variety. The base in the lower rooms, together with the stairway, are of black and gold marble, giving the necessary strong accent to general color scheme.

The successful treatment of this shop is due to the perfect co-operation between designer and client. It was possible to achieve a high standard—a decorative scheme, every item of which was carefully selected as to quality and suitability, because the owner appreciated the fact that the expense adequate for well finished work is more than justified.
PRESIDENT'S CONFERENCE ON UNEMPLOYMENT,
WASHINGTON

Secretary Hoover, Chairman of the Conference, and Colonel Arthur W. Woods, Chairman of the Committee on Community, Civic, and Emergency Measures are keeping in touch with Mayors' Committees throughout the country, to see in what measure the construction of buildings and improvements to public works and public utilities may help to give immediate work to men who need it. The Public Works Committee is co-ordinating this information, and making it available for any community that desires to call upon it.

These construction statistics include: business buildings, educational buildings, hospitals and institutions, industrial buildings, Military and Naval buildings, public buildings, public works and public utilities, religious and memorial buildings, residential buildings, social and recreational buildings, and miscellaneous. The New York District, for September, shows the largest contract awards for any month on the records of the F. W. Dodge Company's Building Statistics. Pittsburgh, also, shows a substantial increase over August. Chicago's decrease is much less than the normal seasonal decline, whereas Philadelphia's is about equal to the normal decline. Residential building leads all others, but the increase in business buildings is also of great significance, the report states.

Approximately half of the building projects contemplated for 1920, in twenty-five Northeastern States, were not contracted. In educational buildings, hospitals and institutions, public buildings, and public works and utilities, there were 18,700 projects contemplated, at a cost of $1,676,843,798, and only 9,556 of these enterprises, costing $812,834,130 were contracted.

If some of these projects, that were planned for last year, could be rushed, at this time, it would help materially in providing jobs for the nation's four million men who are out of work, the Conference members believe.

Colonel Woods, in his recent address before the Mayors' Conference of New York State at Albany, said: "The cure for unemployment is work. There is no doubt about that. The first sound thing to do is to try to get work. If there isn't enough try to increase it, but that must be done only in sound ways. It is generally agreed that if public works could be started up on a large scale they would materially help the situation, for it has been calculated for every man that is put to work in that way, four others are also indirectly put to work in providing for supplies he works for and to meet the additional buying power he represents. It seems sound, therefore, that if the Federal Government, or State Government, or municipal governments throughout the country have plans for public works, approved works that are needed, works that are going to be done any way inside of a few months or half a year or a year, that if those works can be started now it will simply be doing, a little ahead of the time planned, works that it has already been determined upon to be wise. It seems sound to try to start public works approved for later construction, to start them now."

ARCHITECT SELECTED TO PREPARE PLANS FOR CHURCH

Architects Pierpont and Walter S. Davis, 3215 W. Sixth St., Los Angeles, were the winners in the competition conducted to select an architect for the new church building to be erected at West Adams and Figueroa streets in Los Angeles for St. John's Episcopal Church. The church will cost $200,000. Later the church will erect a parish hall and rectory at the same site. The competition was a limited competition conducted under the rules of the American Institute of Architects. Edwin Bergstrom of Los Angeles was the professional advisor and the jury consists of Ernest Coxhead, architect, of San Francisco; Wm. Templeton Johnson, architect, of San Diego, and Dr. George Davidson, pastor of the church. The competitors were: Pierpont and Walter S. Davis, Allison & Allison, Montgomery & Nibecker, Robert D. Farquhar, Reginald Johnson and Lyman Farwell. The winning design was Spanish Renaissance in style.
OFFICIAL NEWS OF PACIFIC COAST CHAPTERS, A.I.A.

WASHINGTON STATE CHAPTER

OCTOBER MEETING

The first meeting of the season was held Thursday, October 6, 1921. There were twenty members and two guests present.

The subject of Fire Prevention Day was touched upon by Siebrand.

The report of the special committee on Delegate Representation was read by Baedcr. The report recommended that the Institute By-Laws be amended to reduce representation and that further representation be made on the basis of two Delegates to each Chapter for the first twenty members or fraction thereof and one additional Delegate for each additional twenty members or fraction thereof. After some discussion the report was amended to read, "one for each twenty members or major fraction thereof."

The meeting went on record as favoring an Architectural Exhibit in the spring of 1922.

The President bespoke a greater support of the Chapter for the Seattle Fine Arts Society.

Mr. Jesse Jackson, the engineer for the Seattle Zoning Commission, gave an informal and interesting talk on the phases of Seattle's Zoning Problem. He indicated the elaborate studies and minute information which was being gathered by the Commission in its work of preparing a Zoning Ordinance for the city.

SAN FRANCISCO CHAPTER, AMERICAN INSTITUTE OF ARCHITECTS

October 20, 1921

The Annual Meeting of the San Francisco Chapter of the American Institute of Architects, was held on Thursday evening, October 20, 1921, in the Architectural Club Room, 77 O'Farrell street. The meeting was called to order by the President, Mr. Geo. A. Applegarth.

The following members were present:


Minutes

The minutes of the meetings held on September 15th and September 20th were read and approved.

Reports 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 the Standing Committees were:

from Mr. Ernest Coxhead, Chairman of Committee on Education and also on Public Information, who submitted a written report on both which were ordered received and placed on file.

Mr. S. Schnaittacher submitted a report on Practice which was ordered received and placed on file. Mr. W. B. Faville, Chairman of the Committee on Coast Chapters and Membership, submitted a report on both which were ordered filed. Mr. Geo. A. Applegarth, Chairman of the Committee on Competitive Events submitted a report which was read and ordered filed. No report was made by the Chairman of the Committee on Legislation, Building Laws, Engineers Council and Contractors.

Unfinished Business

Moved and seconded that the report on "Sectional Awards" be sent back to the Committee for further discussion.

New Business

Two deaths were reported: Mr. A. J. Bryan, Chico, Calif., October 10th and Mr. J. F. Dunn, San Francisco, October 20th, 1921.

A letter from E. C. Kemper in regard to hearing of the Don Lee case received and placed on file.

It was moved and carried that the following resolution be sent to the Board of Directors at their meeting in Indianapolis in November:

"WHEREAS the Judiciary Committee of the Institute have found Chas. Peter Weeks, John Bakewell, Arthur Brown, G. A. Lansburgh and Henry C. Smith, guilty of violating the Code of Ethics in connection with their employment by Don Lee, etc., and recommend to the Board of Directors of the Institute, that the above named Architects be suspended from the Institute for a period of six months; and

"WHEREAS the Board of Directors are about to review the case and act on the report of the Judiciary Committee; the Chapter feels that owing to the rather distasteful and unnecessary publicity that has been given to the matter, and in view of the fact, that all the members involved have maintained a high standard of professional conduct and have always, when called upon, served the Chapter faithfully, and are men whose service and support the Chapter and Institute can ill afford to lose; and

"WHEREAS this entire matter is now in the hands of the Board of Directors of the Institute:

"BE IT RESOLVED: that the San Francisco Chapter of Architects, without passing upon either the technical guilt or the innocence of the above-named members, recommend to the Board of Directors of the Institute, that in case the Board agrees with the findings of the Judiciary Committee, the recommendation of suspension be changed to a warning or reprimand."

A letter in regard to "Fellowship" was 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. A. Appletharth.

Vice-President, Ernest Coxhead.

Secretary and Treasurer, J. Stewart Fairweather.

Directors, Harris Allen for three years; Henry Meyers for three years.

Adjournment

There being no further business before the Chapter, the meeting adjourned at 10:30 p. m.

J. S. Fairweather, Secretary.
INDUSTRIAL

Outlook in the San Francisco Bay District

Industrial activity is the basis of prosperity. San Francisco like every other large city in the country is short of homes and business buildings, besides being out of many other articles that the manufacturing equipment of this city is able to provide.

Industrial activity depends on many factors, including equable wages, working conditions that do not retard production and reasonable costs of raw materials. Wage and labor conditions in San Francisco are in a fair way to be settled both to the satisfaction of the worker and the employer and in the interest of economical production. National labor clouds have been dissipated. The extravagances of the high wage days have yielded to the discipline of necessity.

Material costs, particularly in the building industry have been cut and the trans-continental railroads have made effective reductions in freight rates varying from thirty to fifty per cent.

The logical result of industrial peace and lowered cost of material and freight is resumption of activity in all lines of industry. The greatest immediate activity is to be expected, of course, in the building industry, but there can be no great volume of new building undertaken without stimulating practically every other industry in the community.

There are evidences in the form of increased orders, calls for plans, real estate transfers and other indications of awakening that the San Francisco Bay District is on the eve of a great building revival.

Unemployment is on the wane, investments in the form of stocks and bonds are steadily climbing in value and by 1922 the Building Review believes that the San Francisco Bay District throughout its length and breadth will be wearing the smile that comes only with an unlimited amount of profitable activity.

New Terminal a Monument to Transportation Efficiency

In this issue of the Building Review we are presenting some of the details of the great terminal designed by Bliss & Faville for the Southern Pacific Company and located at 3rd and Townsend Streets. The first unit of this terminal has been completed and rented to four leading wholesale grocery concerns. It is the first building of its kind in San Francisco and should be of overwhelming interest to all interested in the development of this city because it typifies in its design and location, advantages that make San Francisco itself a great seaport and a commercial center of unbounded possibilities.

Located on the banks of the Channel, connected by spur tracks with the transcontinental railroad system, the terminal might be considered as a monument to transportation efficiency. It stands where rail and water meet and is served by both. It combines within itself accommodations for the storage of all kinds of merchandise, including perishables, with every facility for handling this freight, both coming in and going out.

The building is equipped with automatic fire protection, modern freight elevators and spiral chutes for the rapid transfer of merchandise from warehouse to ship, train or truck. Well ventilated, well lighted offices are provided for the clerical army employed there. An effective system of inter-communication including telephones and automatic tubes has been installed and for the furtherance of trade great show rooms have been set aside for the display of merchandise.

The four firms occupying this first unit are: J. H. Newbauer & Co., Sussman, Wormser & Co., Dodge, Sweeney & Co., and Haas Bros.

The building is 100 feet wide and 825 feet long. It is bounded by the Channel on one side, Berry Street on the other, and Third and Fourth streets on the ends. There is a spur track on the Channel side to take care of inward rail shipments. The Channel takes care of water shipments.

Outgoing freight leaves the Berry Street side.
The offices are on the second floor and to provide access to them without interfering with the delivery of goods an elevated sidewalk has been constructed.

Every warehouse, however, is provided with an entrance from the street level. All of the warehouses have elevators to take care of incoming and outgoing freight.

The elevators are designed to carry from 4000 to 6000 pounds and are provided not only with the regular control but with an auxiliary push button device for leveling the car at each floor. All the warehouses are equipped with spiral chutes, pneumatic tubes and intercommunicating telephones.

Each warehouse has an incinerator on the first floor which takes care of the refuse which reaches the furnace down an enclosed slide which serves the double purpose of chute and flue.

All of the outside doors are provided with Kawneer rolling doors. The entire building is equipped with automatic sprinklers. This protection gives the building and its contents a minimum rate of insurance.

The building is arranged also for a Telephage System for loading and unloading truck bodies. This system has not yet been installed but will be put in as soon as necessary. By means of this system truck bodies can be loaded with individual orders and be ready to take the place of the empty truck body at a moment's notice.

The structure is entirely of re-inforced concrete with pile foundation designed to carry 250 pounds to the square foot.

Bliss and Faville were the architects, Maurice Couchot the structural engineer and W. S. Dinwiddie the contractor.

(Continued on page XIV)
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NEW TERMINAL
(Continued from page 92)

The cars travel from the first to the sixth floors, a distance of about 60 feet. The platforms vary in size from 8'0" x 7'6" to 11'0" x 7'6" and are provided with sheet steel panels 6'0" high on the sides not used as entrances. The elevator cars, also, have hinged diamond mesh wire tops.

A car holding safety device operated by fly governor is provided for each car. Planed steel tee rails are used for the cars and counterweights throughout. At each floor landing there is a vertical lifting gate equipped with electric contact connected so that elevator is inoperative with a gate open. Each gate, also, has a latch which locks the gate so that it can not be opened except when the elevator is within 6" of the landing.

The elevators are operated by dual control, i.e., car switch and full automatic, either of which may be used by throwing over a switch in the car. With the full automatic control, the elevator may be called or sent to any floor from both the car and the floor landings, a bank of push-buttons numbered to correspond with the various floors being provided in the car and at each floor landing as well.

(Continued on page XVI)
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Installation

THE HASLETT SPIRAL CHUTE CO.
Philadelphia  Chicago  San Francisco
New York  Pittsburgh  Baltimore
NEW TERMINAL
(Continued from page XIV)

At the first floor, a bank of dispatcher buttons is mounted in addition to the main operating buttons. When the elevator is operated by the dispatcher buttons it is inoperative by the floor buttons on reaching its destination until the gate at the floor has been opened and closed. This makes possible sending the elevator without outside interference to a floor with goods to be unloaded at that floor before the elevator is operative from any other point.

The elevators comply in every detail with the Safety Orders of the State of California and were officially inspected and approved by,

the Industrial Accident Commission before being accepted by the Southern Pacific Company.

HASLETT SPIRAL CHUTES

Notable in the time and labor saving devices provided in the great terminal are ten Haslett Spiral Chutes for the quick delivery of merchandise from the upper floors of the building to the shipping departments on the first floor, or direct to truck, car, or boat, as desired.

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The BUILDING REVIEW

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Residence of Mrs. Harry Hill, San Francisco, Calif.

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Factories are said to be uninteresting. Some are, not ours. There's something here that keeps one buoyed to his best efforts. We like to believe that it's the thought that our sphere in life is the making of products that are useful and beautifying. We opine our daily efforts make the world a better place in which to live.

For Busy Architects and Engineers we list a few reminders

PIONEER WHITE LEAD is a Fuller product. Master and journeyman painters are genuinely pleased when you specify Fuller's.

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TWO DISTINCTIVE CALIFORNIA HOMES

By Harris Allen

When Albert Farr created the home of Robert S. Moore in Menlo Park, a dream came true. With an author's privilege, let us translate his thoughts and visions into speech.

"It is Mexico, the golden; Mexico, land of sunshine, of fruit and flowers; Mexico, the ‘New Spain’ of the West. The traditions of the early colonists from the mother country have become a settled heritage in language, customs, buildings, modified sufficiently to meet local conditions of climate and soil.

"In my veins flows the blood of the conquerors. The home I build must recall the land of my forebears; in it I wish reflected the pride and pomp of a noble race, softened by the charm and romance of its devotion to family ties.

"The spirit of hospitality must be evident—that traditional hospitality of the Orient which has become also a tradition of Spain, revered and handed down to Spain’s children.

"And, indeed, there must be more than a suggestion of the Orient itself. For Moorish art and imagery are entwined in the life of Spain. Let there be felt, then, subtle influences of Grenada, of the Alhambra; the cool
tinkle of water in a thirsty land, a tiled fountain in a courtyard, delicate arabesques and arches, interlacing grilles, recessed balconies.

"But there must be no discord between the old world and the new. Our actual conditions are to be considered; our climate and countryside, the wealth of verdure, the spread of branch, and the riots of color that succeeding seasons bring. And all the accessories and devices that add to the comfort and convenience of modern life are to be provided. To weld together all these varying elements of the past and the present into a harmonious ensemble—this is the ideal for which I will strive."

Accepting the differences between Californian and Mexican vegetation, this is the ideal which Mr. Farr has accomplished.

An alluring picture greets you as you turn from the highway into this broad avenue with its sentinel guard of tall, straight poplars. Straight through the outer court gate goes your eye, to the focal point of the picture—the richly modeled Churrigueresque doorway "chiseled like a jewel," as Ibanez says of the Toledo porch. The charm of this bit of fanciful ornament is emphasized by its axial importance, the surrounding simplicity of wall surface, and its sentimental significance.

The branches of a magnificent oak cast delicate tracery of light and shade upon the near corner of the house, still further enriching the setting of the door; and the mass outline, above and around, frames a background with a well-defined "informal balance."

While all these elements of the picture do not consciously register at once, it is certain that the mellowness of color causes an instant stir of pleasure. Walls of a soft salmon pink;
so that it will form a little retreat of absolute privacy. The service court is surrounded by flower beds and orchards, and from this side the house presents a picturesque grouping of roofs and chimneys far removed from the usual utilitarian aspect.

A square, high-vaulted hall connects the entrance directly with the patio, which is the heart of the house. It is practically impossible to describe any patio; there is an elusive charm that must be experienced in person. This one, indeed, is not just an enclosed court; it has a romantic air; one expects something to happen, but nothing except what is peaceful and joyful.

Only the growth of vine and shrub is needed to perfect it, especially in the case of the urns cropping out of the roof along the sides, and the balcony at the rear. Incidentally, the corresponding pinnacles along the outer terrace side of the living porch do not quite justify themselves. A clear sweep of roof would have been somewhat more pleasing there.

The living porch itself, with its walls of sliding glass between patio and terrace, is a long room in pleasant tones of tan with an extremely interesting Moorish tile wainscot of blue and grayish white with touches of yellow. The wooden ceiling is noteworthy, stained a soft dove gray.

Living and dining rooms are treated with plain plaster walls painted a creamy white, and with rich honeycomb ceilings. They are dignified, restful rooms, and furnish a good foil for the more brilliant portions of the house.

The stair hall opening from the patio and leading to the private suites in the upper story has quite the flavor of Grenada with its tiled wainscot and floor, its curving stairs with delicate metal railing, and its fountain under the broad Moorish arch. When these rooms are completely and consistently furnished the interior of the house will acquire the distinctive character which the exterior already possesses; for, although barely finished, this house and its setting have already acquired individuality and harmony.

The home that Kenneth Macdonald has designed for Mrs. Harry Hill in San Francisco has quite as distinctly the urban air as Mr. Moore’s house that of the open country. It presents to the public two facades which, while not austere, are formal and dignified. The functions of the house are well expressed in the exterior. Sufficient emphasis is placed on the main entrance without overelaboration. The fenestration is well proportioned, although the quoining seems somewhat over-prominent by contrast with the red brick wall. The effects of weather and city smoke will soften this before long. The planting
strikes one as being too stiff, and it is to be hoped that the Christmas-tree effect will be changed, leaving perhaps the Italian cypresses at entrance and corners, but substituting shrubbery elsewhere.

Architectural detail is refined and well balanced. Altogether this house bids fair to achieve distinction in the future as one of the city’s notable private edifices.

Naturally, there is more elaboration on the interior. Nevertheless, there is no fussy or meretricious ornament.

The entrance hall is more than a mere passageway; it is a stately apartment in itself. Walls of Caen stone, a handsome cinquecento ceiling and a parquetry floor form the setting for a particularly interesting stairway, which is semi-detached behind a fine simple Palladian archway, and is treated in an airy, flying-buttress style with slender metal railings and open arches.

A very similar style prevails in the dining-room, with the addition of a painted valance under the ceiling which is certainly effective even if slightly theatrical. After all, there is plenty of precedent for this kind of mural decoration, and we in America are probably too timid in its use. There are infinite possibilities for individuality in decoration, with abundant historical sources for inspiration.

The living room is more strictly in conformity with the exterior style of the house. It is a formal, elegant room with painted paneled walls. Far from being Rococo, the ornament is delicate and restrained and the room, which is a large one, does not suffer from the lack of scale which is so often the case with interiors of this character. The furniture is excellently suited to the room and to the space, and the effect is one of refinement, of distinction.

These two residences, neither of which is pretentious or extremely costly, are good examples of the progress being made in California along the lines of individuality and consistency in architecture.

**FIFTH AVENUE TRAFFIC TOWERS**

Fifth Avenue is New York’s pride. The Fifth Avenue Association recently appointed a Traffic towers Committee to work out plans for the construction of permanent towers to replace the present temporary structures.

Architects and artists were asked to submit designs in competition for a series of prizes offered by the committee. From 130 widely different designs submitted, fourteen have been selected by the committee in charge.

In discussing these designs the architectural adviser to the Traffic Towers Committee said:

“In all of the designs there have been practically only two methods employed. There has been either the single shaft used as a support or smaller, separate columns with an open space or a grill-work between. The traffic tower cannot be constructed as the lighthouse, which rises to a natural point, for such construction in a tower would obscure the traffic on either side of the tower. Personally, I think I prefer the single shaft tower, as it enables one to see ahead better than is the case with the tower with several shafts.

“As for material, bronze seems to me to be the most economical and beautiful. Bronze would be economical because a single mould would be made and towers reproduced from it indefinitely.”

The towers are to be the gift of the association to the city, and have already been accepted by the city through the Board of Estimate, with the provision that the design be approved by the Municipal Art Commission. The towers will replace the present structures at Thirty-fourth, Thirty-seventh, Forty-second, Fiftieth and Fifty-seventh streets.
Plate 65

CARRIAGE COURT GATEWAY, RESIDENCE OF ROBERT S. MOORE
MENLO PARK, CALIFORNIA
ALBERT FARR, ARCHITECT

DETAIL OF MAIN ENTRANCE, RESIDENCE OF ROBERT S. MOORE
MENLO PARK, CALIFORNIA
ALBERT FARR, ARCHITECT
MENLO PARK, CALIFORNIA

THE OAKS AND LAWN, RESIDENCE OF ROBERT S. MOORE

Photo by Gabriel Mousin.

ALBERT FARR, ARCHITECT
The Mirror Pool, Residence of Robert S. Moore
Menlo Park, California

Photo by Gabriel Moulin.

Albert Farr, Architect
FOUNTAIN IN PATIO, RESIDENCE OF ROBERT S. MOORE
MENLO PARK, CALIFORNIA

Photo by Gabriel Moulin.

ALBERT FARR, ARCHITECT
THE MIRROR POOL, RESIDENCE OF ROBERT S. MOORE
MENLO PARK, CALIFORNIA

Photo by Gabriel Moulin.

ALBERT FARR, ARCHITECT
FOUNTAIN IN PATIO, RESIDENCE OF ROBERT S. MOORE
MENLO PARK, CALIFORNIA

Photo by Gabriel Moulin.

ALBERT FARR, ARCHITECT
Plate 70

THE BUILDING REVIEW

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PATIO TOWARD LIVING PORCH, RESIDENCE OF ROBERT S. MOORE
MENLO PARK, CALIFORNIA
ALBERT FARR, ARCHITECT

ROSE GARDEN FROM TERRACE, RESIDENCE OF ROBERT S. MOORE
MENLO PARK, CALIFORNIA
ALBERT FARR, ARCHITECT

Photo by Gabriel Moulin.
MAIN ENTRANCE, RESIDENCE OF MRS. HARRY HILL
SAN FRANCISCO, CALIF.

KENNETH MCDONALD, ARCHITECT
DOORWAY FROM DINING ROOM TO HALL. RESIDENCE OF MRS. HARRY HILL
SAN FRANCISCO, CALIF.

KENNETH MCDONALD, ARCHITECT
DETAIL OF PANELING IN SALON, RESIDENCE OF MRS. HARRY HILL,
SAN FRANCISCO, CALIF.

KENNETH McDONALD, ARCHITECT
Dining room chimney piece, residence of Mrs. Harry Hill, San Francisco, Calif.

Kenneth McDonald, Architect
WHAT GARDEN CONSTRUCTION DEMANDS
By Horace George Cotton, Landscape Architect

Probably the feature that has caused the greatest comment in the gardens recently developed at the R. S. Moore home at Menlo Park is the rapidity with which these new gardens have taken on an old and mature effect. Only three months after the gardens were completed attention was called to the fact that they looked to be at least five years of age. Most new places look new, and do not take on the time-worn feeling for several seasons and only after nature has been given time to do her work. In this case, however, time was "taken by the forelock" and nature by the "ears" and given a premature push into early maturity. As in business Mr. Moore demands maximum results in a minimum of time, so in this work maximum results were sought for in the shortest possible period.

Two big factors enter into the element of quick results in garden construction: First, broad sweeps of lawn, and second, the purchase of large-sized nursery stock. By largest size nursery stock, we do not mean a full-grown tree, but simply the largest size of stock that a nursery can handle with practical results. Thus in our selection of the nursery stock for this place only the very finest and largest specimens were purchased. It is a peculiar fact that there are no single nurseries in this State that contain the best stock of all varieties. The immense number of ornamentals which thrive successfully in California make it impossible for nurseries to specialize in everything, and we have found after much experience that it usually takes at least a dozen nurseries to supply every variety in a large plan if the best stock is desired. In this garden seventeen nurseries were patronized to obtain the stock necessary. Incidentally this is one of the big reasons why it does not pay to place the development of a garden plan in the hands of any one nursery.

The main landscape plan in this garden was first conceived and designed by Professor John W. Gregg, of the University of California, and the excellence of the scheme as
worked out has more than demonstrated Professor Gregg’s ability in landscape design. The general scheme was of a two-fold nature: First, the carrying out of axes and lines of the house into the garden, thus tying in the garden with the house and making of the two a closely bound and harmonious unit, and second, to divide the garden into a number of separate and distinct compartments, as out-of-door rooms, each with its own function to perform. Only a visit on the ground can show how perfectly these effects have been worked out.

As the work progressed the writer had the privilege of developing some parts more in detail than the original plans indicated. Such an area was originally devoted to a gardener’s plotting shed and hot beds, but was later re-designed to contain a garden house, a rockery with tree ferns and a naturalistic pool and waterfall, with an open-air fireplace for summer evening entertainment. A number of these details are shown in the illustrations. This compact little group of attractions exemplify the out-of-door living-room idea, and will be used continually in good seasons of the year.
INDUSTRIAL

Architects' Heating Problems Worked Out At This Laboratory

Architects can have their heating problems worked out for them at a laboratory recently equipped by the Pacific Gas and Electric Company at 241 Stevenson street. This includes heating problems as they relate to regulating the temperature of residences, offices, warehouses, stores, and public buildings, and involving the use of heat for manufacturing, canning, and other industrial purposes.

The laboratory is big enough for the installation and demonstration of practically every approved heating device and is in charge of competent engineers.

One department is given over to the problems of heating factory and office buildings.

Here a Hall furnace is shown. This furnace is made by the D. H. McCorkle Manufacturing Company, Oakland, Cal., and the Pacific Gas and Electric Company has recently installed a similar system in the Golden Gate Park Museum. A bank of eight units has been placed for the Zellerbach Paper Company. A unique feature of this latter installation is that the gas can be turned off and the fans used for ventilation in the summer months.

These furnaces supply 5,000 cubic feet of hot air per minute, and are ideal for heating large spaces where the initial cost of radiator or steam equipment would be prohibitive.

Metal work on the distributing lines is installed to meet individual requirements. According to present plans, several units of the Hall system will soon be in operation in one of the large moving picture studios, where, on account of the vast space, heating has always been a serious problem.

SWITCHBOARD CONTROL

An attractive feature of the Hall System is the switchboard control. By pressing buttons the volume of heat can be reduced to two-thirds or one-third or completely shut off, as required. This switch can be located in any convenient place.

Two Bryant steam boilers, a No. 18 and No. 36, are also set up for demonstration. The No. 18 is completely equipped and in working order subject to such observations and tests as the prospective buyer may desire. The eight-story Heine Piano Building is equipped with this type of boiler, and Bryant boilers supply heat for the Southern Pacific Terminal Warehouse. A complete description of the latter unit may be found in the November issue of the Building Review.

Another display shows the Rector System. This is also a unit heating system with a good
record for economy. The American Can Company is one of the largest factories to adopt this system, and in the Printers' Building 33 of these radiators are in use.

There is on display in the laboratory a battery of high-pressure Kane boilers, one of 10-horsepower, one of 5-horsepower, and one of 4-horsepower.

DOMESTIC WATER HEATERS

Of special interest to architects is the display of Hoffman, Humphrey, Pittsburg, Troop, and Ruud water heaters. These heaters are connected and are demonstrated under actual working conditions.

To acquaint those most interested with the laboratory and let them know the service it is equipped to perform, dinners are frequently given to groups of builders, architects, manufacturers, and others interested in heating problems. The accompanying picture shows the guests at the latest laboratory banquet. It was given November 29, 1921, and the guests included members of the Retail Furniture Dealers' Association, Hardware and Implement Dealers' Association, representatives of C. B. Babcock Company, Pacific Gas and Electric Company and other organizations.

The dinner for this and all other banquets was prepared on the apparatus installed in the hotel and restaurant section, where there is equipment for everything from making a slice of toast to baking a ton or two of bread and from broiling a chop to roasting an ox.

The first installation is the Garland hotel equipment used in principal hotels on the Pacific Coast and in the East. The exhibit consists of four standard ranges and a steam table underfired with gas burners.

Another installation shows the Lange end-fired French range with high shelf, supple-
m ented by a Roberts portable bake oven, and a steam table equipped with steam coils in box and in serving shelf. This is a feature that keeps the plates warm between the time they are served by the chef and are taken by the waiter. Steam is furnished by a Bryant gas-fired boiler and returned through a trap to an open receiver near the boiler, where a float switch actuates a small electric pump. When the receiver is full it automatically starts the pump and returns the condensation to the boiler.

The next exhibit, manufactured in San Francisco by John G. Ils, is a standard 61/2-foot brick set French range with a No. 3 portable gas bake oven. This equipment has been adopted as standard by the Pig'n Whistle cafes.

Two small ranges, an Eclipse No. 25-82 and No. 25-40, are installed to illustrate the needs of the small restaurant and short-order cafe.

Another appliance is the bake oven burner. This burner is used in connection with the ordinary brick Dutch oven. It is connected in such a way that the flame can be directed at any angle upon the oven. With this equipment an ordinary oven can be heated in a little over an hour with the consumption of 900 feet of manufactured gas.

FOR THE INDUSTRIAL FIELD

A large section of the laboratory is given over to the display of practical gas-heated devices for use in the industrial field. Blast furnaces for melting metals, forges for heating rivets, torches for cutting, welding and annealing, are but a few of the appliances at the disposal of the person interested. Here you can see a demonstration under actual working conditions, have tests made by a competent engineer, and obtain reports covering installation and operating costs.

This laboratory is of un estimable value to the community. It is no longer necessary for the architect or builder to install heating appliances of hearsay value. There have been many cases where entire heating systems have been torn out and replaced, all on account of the inability to obtain proper tests and demonstrations prior to the installation. With its corps of industrial engineers, the Pacific Gas and Electric Company stands ready to serve the public in the solution of its various heating problems.

The Boston Varnish Co., A. L. Greene, Manager, announces that it has moved its San Francisco office to 1151 Mission street.

WHY A POWER PROGRAM IN CALIFORNIA

By H. G. BUTLER

Former Power Administrator for California

The 6,000,000 horsepower of potential electrical energy in California’s streams—only one-sixth of which is now in use—if it were completely developed and could be laid down in the New England States, would bring every year, at existing rates, the enormous sum of $1,000,000,000. Developed and used in California it would cost the consumers but half that amount.

If the present rate of growth in the power industry continues—and there is not the slightest reason to think that it will not continue—the year 1941 will see the California power streams completely harnessed. It will see also a greater difference between power rates, east and west. Comparing New England’s rate with California’s, the ratio is now about two to one. But the future power of California, and all the west, will be hydroelectric, and in New England and the east steam-electric—steam generated from fuels constantly increasing in cost.

So in twenty years the difference between the two rates cannot fail to be even more to California’s advantage than it is now. But with no change, the California producer will have an edge on his eastern competitor of $500,000,000 per annum in power costs—a sum that would “Bridge the Bay” twelve and one-half times yearly.

He has a proportionate advantage today. The average rate at which the product of the power companies of the state is sold is somewhere around two cents per kilowatt-hour, a figure that of course is lower than the average lighting rate, which varies; in San Francisco, for instance, it is from 8 cents as a maximum, to 1.5 cents as a minimum. But the average rate, which is governed more by the price paid for commercial than for lighting power, is the important factor. At two cents per kilowatt-hour the power companies of California can with confidence invite comparison with rates for similar service anywhere.

The remarkable growth of the west during the last twenty years has been largely due to just this fact. In that time the population of the United States as a whole increased 110 per cent; in the west it increased 403 per cent. The assessed value of all property grew in the United States 451 per cent; in the west 1341 per cent. The annual value of manufactured products jumped 1070 per cent in the United States and 2096 per cent in the west. During the last ten years, the increase
The Chinese, the Australian, the Russian and the Philippino look for this trademark.

It means the same thing to them that it does to the Pacific Coast Public.

It denotes a quality unexcelled by any other manufacturer---a price no higher than inferior brands---beautiful artistic designs---and an ironclad guarantee.

PACIFIC PLUMBING FIXTURES

Main Offices: 67 New Montgomery Street, San Francisco
Factories: San Pablo and Richmond, California
Branches: Portland and Los Angeles
in bank clearings in the United States was 427 per cent and in the west 1218 per cent.

It is not necessary to go far back in the history of the State to reach a time when it was a bold and adventurous thing for a power company to spend a few hundred thousand dollars in a power plant 200 miles away in the mountains, with its dams and canals, and its tower lines carrying a thin copper thread to bring the product to market. Such an investment was followed by a period of feverish activity in securing consumers to utilize the output. There were factories here, and mines, and irrigation pumps, but they were using other forms of energy. Salesmanship was necessary to bring about the substitution of electric power.

Today electricity has no competitor in these fields. If it cannot be secured the projected factory and the proposed pumping plant are not constructed. In the process of building up and developing the community, the sequence is, first the power, then more factories, more farms and more intensive cultivation, more mines opened up. From these come more transportation, more people—all demanding more power—and a strong and healthy growth.

In marked contrast to the situation a few years back, the power companies of the State today estimate that it will be necessary for them to raise and spend $500,000,000 in the next ten years for new plants and the appurtenances required to bring this power to the consumer. They no longer have to devote time to the missionary work of making converts to the electric motor.

Fifteen million dollars can be spent by the Pacific Gas and Electric Company on the Pit River, by the Great Western Power Company on the Feather, by the San Joaquin Light and Power Corporation on the San Joaquin, or by the Southern California Edison Company on the Big Creek project without definite arrangements for the sale of the energy. The market will be ready when the power is. Indeed, during the last three years the demand has always been greater than the supply, and the problem of the future is not in selling power, but in getting money enough to develop it.

In a recent address, a prominent oil man of the Coast said:

"We cannot continue to burn more oil than we produce, and we cannot continue indefinitely to count on even our present production. There can be only one answer to the situation—some one who is burning oil today will have to use another source of energy tomorrow."

He might have added, "the only other source is hydro-electricity."

The oil companies are not required to keep California supplied with oil. The power companies, being public utilities, and as such having distinct obligations to the public, are committed to the definite undertaking of seeing that California's hydro-electric development is sufficient, not only to carry the increasing load in its own field, but to take up their burdens when the oil companies lay them down.

This is the power program and, to quote from the address again, nothing can be more certain than this:

"We must realize that the success of this program is vital to our prosperity, and that success can come only through the substantial encouragement of community support."

**THIS MILL WILL TURN OUT A GOOD 900 FOOT BOARD**

The Louisiana Celotex Company of New Orleans has a plant at Narrero where a single board of these dimensions can be turned out. It is not cut from any tree, however, but manufactured from bagasse, a once waste material from the sugar cane fields. The bagasse which is taken from the rollers of the sugar mills after every drop of sweet juice has been extracted from it reaches the velotex plant in bales. Here it goes through a simple process after which it emerges from the finishing end of the machinery in the form of a 12 foot to 900 feet board 3/4 of an inch thick and of any length up Celotex weighs approximately 1.16 of a pound to the square foot. It is homogeneous, in the sense that it is not built up of layers, it is filled with minute air cells formed by the interlacing of the fibres, and is particularly valuable for its insulation qualities. It can be handled like ordinary lumber and sawed to any dimension desired.

The manufacturers guarantee it against decay and recommend its use in the construction of incubators, bee-hives, telephone booths, phonograph rooms and other places calling for absolute sound proof and thermatic qualities.