

Questions and Answers.

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

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

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

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

Artificial Stone—Valuable Patent Right for Sale.

(SEE ALSO OUTSIDE BACK COVER.)

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

COMPOSITION FOR ARTIFICIAL STONE, ETC.

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

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

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

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

Material for One Hundred Yards of Three-Coat Plastering.

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

HILL'S
Patent Inside Sliding Window Blinds,

Are Adapted to any Style of Window,
And Suitable for all Buildings, Dwellings, Stores, Office
Buildings, and for Houses Built to Rent, Hotels,
Boarding or Lodging Houses are
Unexcelled.

They are entirely inside of the window casing, and while requiring no furring out or boxing, make it an impossibility to tear curtains, interfere with plants or window ornaments, or become broken by contact with chairs or other movable articles.

The light can be admitted and sunlight excluded from any part of the window; can be instantly removed and taken to any part of the house to clean and as easily replaced.

They can be opened or closed with the window raised, and without removing articles from the window-sill, and cannot blow open or rattle. The blind is very light (one-half inch in thickness) and strong, possessing more durable qualities than a hinged blind one inch in thickness.

There is no sagging, hanging, or getting out of order.

They are made in three sections in height (each section sliding past the others), and any number of divisions in width corresponding to the folds in the old-fashioned folding blinds. They require no hinges—all trimmings furnished with blinds—are made of all woods, finished or unfinished.



The Blind manufactured throughout the United States and Canada by the members of the HILL SLIDING BLIND ASSOCIATION, is the only sliding Blind ever put into practical and general use, or that has been adopted and used by the leading architects and builders, both East and West.

It is rapidly displacing the objectionable folding blind, also shades, which since they have ceased to be considered the fashion, are used principally in cheap dwellings and tenements.

The Hill Blind is the only sliding blind made of white cedar, and where the grooved slide can be used as the window stop, or placed on the pulley stile, similar to the ordinary stop—the slide is only 2 1/2 inches wide—plenty of room can be obtained by setting the casing flush with the pulley stile, in light studded buildings. NOTE.—Any other sliding blind using the slide as the stop for the sash, is an infringement of our patents of February 26, 1884, and February 24, 1886, and anyone selling, using, or making such a blind will be prosecuted by the HILL SLIDING BLIND ASSOCIATION, as they are determined to stop the sale of several cheap and worthless imitations.

The Hill Sliding Screen, working the same as the blind, is the only screen covering one-half of the window, which will remain at any desired point, and which can be instantly removed, when not required, or to clean the windows.

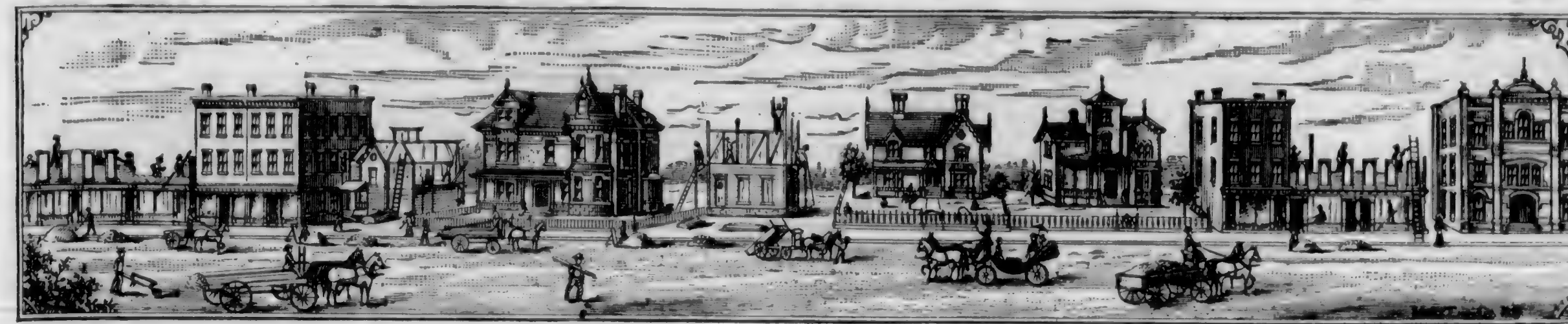
Over eight thousand sets have been specified and put in, throughout the Pacific Coast, since April 1, 1885.

We refer to the following prominent architects of San Francisco, who have used or specified the Hill Blind and Screen, also hundreds of owners throughout the Pacific Coast:

Miller & Armitage, Pissis & Moore, H. D. Mitchell, John Marquis, John M. Curtis, Moore & Schultze, J. T. Kidd, J. H. Humphreys, T. J. Welsh, Jas. E. Wolfe, Townsend & Wreken, Chas. J. Deylin, Geo. E. Voelkel, Copeland & Banks, M. Balczynski, Edw. R. Swain, Chas. V. Pierce, S. & J. C. Newson, Wm. Mooser, Chas. Geddes, Macy & Jordan, H. T. Bester, A. A. Bennett, Salfeld & Holberg, A. J. Barnett, John J. Clark, G. V. Capelletti, P. R. Schmidt, M. P. Schetzle, Clinton Day.

HINDES & MURRAY,
Main Office and Factory, 411 Mission Street, Corner of Fremont.

Sole owners of the right to SELL and MANUFACTURE for the Pacific Coast, except Counties of San Diego, Los Angeles, San Bernardino, Santa Barbara, Kern, San Luis Obispo, and Ventura in California.



COUNTRY

BUILDING INTELLIGENCE

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

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

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

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

Colton.

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

Mural Painting (new), for \$3.00.

Home Hand-Book, for \$10.00.

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

Limes, Cements, and Mortars, for \$4.00.

History of Architecture, for \$15.00.

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

Shavings and Sawdust, for \$1.50.

American Cottage Building, for \$3.50.

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

Architecture and Building, \$3.50.

American Cottage Building, for \$3.50.

Florida, San Jacinto Co., Cal.

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

Oakland.

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

Oregon.

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

Artisan, for \$5.00.

Builders' Guide, for \$2.00.

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

Practical Perspective, for \$5.00.

Woodward's Country Homes, for \$1.50.

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

American House Carpenter, for \$5.00.

Cutting Tools, for \$2.00.

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

Woodward's Country Homes, for \$1.50.

Plaster, How to Make it, for \$1.00.

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

Steel Square Problems, for \$1.00.

Workshop Companion, for 35c.

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

Builders' Companion, for \$1.50.

Artistic Homes, for \$3.50.

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

Wonders of Art, for \$1.25.

History of Architecture, for \$15.00.

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

Builders' Companion, for \$1.50.

Builders' Work, for \$5.00.

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

Ruskin's Works (four volumes), for \$6.00.

Industrial Drawing for Carpenters, for \$2.00.

Redlands.

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

Artistic Homes, for \$3.50.

Modern House Painting, for \$5.00.

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

American Cottage Homes, for \$3.00.

Builders' Work, for \$5.00.

Mrs. C. Wells. Frame residence. Lancaster & Minor, contractors. Cost, \$3,600. E. Newcomer, architect.

Practical Perspective, for \$3.00.

History of Architecture, for \$15.

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

American House Carpenter, for \$5.00.

Cutting Tools, for \$2.00.

Washington Territory.

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

Science of Carpentry, for \$4.00.

Universal Assistant, for \$2.50.

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

Building Superintendence, for \$3.00.

American Cottage Homes, for \$3.00.

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

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

Miscellaneous.

BIDS FOR PROPOSED NEW SCHOOL-HOUSES IN S. F.—Bids were opened for building, according to plans and specifications of the department architect, two school-houses, one on Union Street near Franklin, and the other on Page Street between Baker and Broderick. The bids were as follows:—

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SAN FRANCISCO BUILDING NEWS.

A

Ashbury, nr. Waller. Two-story frame.
O.—W. T. James.
C.—A. R. Denke.
\$1,700.

B

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

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

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

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

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

C

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

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

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

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

D

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

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

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

E

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

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

F

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

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

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

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

Folsom, nr. Sixth. Additions.
\$600.

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

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

G

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

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

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

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

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

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

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

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

H

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

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

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

Harrison, cor. Fifth. Additions.
\$800.

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

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

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

Larkin, nr. Pine. Additions.
\$500.
Larkin, cor. Washington. One-story frame.
O.—J. F. Stewart.
C.—R. M. Murray.
\$3,000.

M

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

Mason, cor. Filbert. Additions.
\$800.

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

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

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

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

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

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

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

N

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

O

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

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

P

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

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

Polk, nr. California. Additions.
\$600.

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

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

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

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

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

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

R

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

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

S

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

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

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

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

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

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

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

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

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

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

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

T

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

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

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

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

SPECIFICATIONS.

We have on hand a supply of a
NEW FORM OF SPECIFICATIONS,
Especially adapted for the Pacific Coast.

We will send a Copy to any address upon receipt of 50 cents, or \$5.00 per dozen.

Also Palliser's new Specifications, just received.

We can supply any number of either the above.

SAN FRANCISCO LUMBER CO.,
Lumber Dealers
PRINCIPAL OFFICE, PIER 12, STEUART STREET.
YARDS AT
Pier 12, Steuart Street, Third & Berry Street, Pier 3, Steuart Street.
WM. B. HOOPER, Manager. C. A. BARKER, WALTER DICKINS, Assistant Managers.

Notes.

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

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

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

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

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

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

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

A Carpenter and His Shavings.

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

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

We have received the Prospectus of the Academy of Architecture and Building, located at 3065 South Ninth Street, St. Louis, Missouri, of which H. Maack is the principal. The institute is designed to be for the building trades what the commercial colleges are for business men. Instruction is to be given only during the winter, leaving young mechanics their time to devote to remunerative employment during the busier months of the year. By this means, it is argued, young men who could not otherwise afford the cost of instruction, will be enabled to avail themselves of the opportunities afforded. The circular contains the course of study through three terms, and also indicates the requirements for admission, as well as cost. This enterprise seems to be a commendable effort to afford technical education in a form to be of the greatest service to young mechanics in the building trades.

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

For cast iron multiply the cubic inches by	260
" " " " " " " " " " " "	450
" wrought iron " " " " " " " "	281
" " " " " " " " " " " "	487
" stone " " " " " " " "	9
" " " " " " " " " " " "	156
" lead " " " " " " " "	41
" " " " " " " " " " " "	710
" oak " " " " " " " "	33
" " " " " " " " " " " "	58
" clay " " " " " " " "	78
" " " " " " " " " " " "	135
" water " " " " " " " "	36
" " " " " " " " " " " "	feet by 62.5

CARPENTRY MADE EASY.

By Wm. E. Bell, a practical mechanic, who fully appreciates, from personal experience, that there are many things perplexing to understand and difficult to do until they are fully explained and tested. It is designed to make the science and art of carpentry clear and comparatively easy to all who require information on the subject. Price, \$5.00 by mail, prepaid.

Professional Partnership Desired.

I DESIRE to correspond with any young architect or draftsman who has a thorough knowledge of construction and building, and who is desirous of going into business for himself, and who may be desirous of a partnership, to locate at Colton or vicinity. Can guarantee a good practice; have had five years' experience in architect's office. Address all correspondence to

Wm. A. NETHERCOT,
Box 201, Colton, Cal.

AMERICAN GLOSSARY OF ARCHITECTURAL TERMS.

PRICE, FIVE DOLLARS.

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

HILL'S PATENT INSIDE SLIDING BLINDS.

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

POOR'S DIRECTORY OF RAILWAY OFFICIALS.

PRICE, TWO DOLLARS.

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

Market Reports.

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

Pine, Rough, per M feet.....	\$22 50
Pine, Rough, No. 2.....	18 50
Pine, Rough, 40 to 50 feet lengths.....	23 50
Pine, Rough, 50 to 60 feet lengths.....	24 50
Pine, Rough, 60 to 70 feet lengths.....	25 50
Pine, Selected.....	26 50
Pine, Clear.....	33 50
Pine, Fire Wood.....	10 00
T. & G. Flooring, 1x8.....	35 00
T. & G. Flooring, 1x6, 1x4, 1x3, 1x2, 1x1 and narrower.....	40 00
T. & G. Flooring, No. 2.....	29 50
Stepping.....	45 00
Stepping, No. 2.....	32 50
Redwood, Rough.....	22 50
Redwood, Rough, No. 2.....	18 50
Redwood, Surfaced.....	37 50
Redwood, T. & G. 6 in., 12 feet and over.....	34 00
Redwood, T. & G. 6 in., 7 to 11 feet.....	27 00
Redwood, T. & G. 6 in., under 7 feet.....	24 00
Redwood, Rustic.....	37 50
Redwood, Rustic, No. 2.....	32 50
Redwood, T. & G. Beaded, 12 feet and over.....	36 00
Redwood, T. & G. Beaded, 7 to 11 feet.....	27 00
Redwood, T. & G. Beaded, under 7 feet.....	24 00
Redwood, Siding, 1 in.....	25 00
Pickets, Fancy.....	19 50
Pickets, Rough Pointed.....	17 50
Pickets, Rough Square.....	17 50
Shingles.....	2 25
Laths, 1x.....	4 00
Laths, 1x.....	4 50
Furring, 1x2, per lineal foot.....	01
Battens, 1x3, per lineal foot.....	01

THE CALIFORNIA ARCHITECT AND BUILDING NEWS.

VOLUME VIII.

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

NUMBER 10.

THE California Architect & Building News.

Established January, 1879.

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

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

Published on the 15th of each Month.

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

OUR ADVERTISING RATES.

Front Cover, Outside, Each Insertion	Per Square \$ 2.50
Back Cover, Outside, Each Insertion	do. 2.00
Page Preceding Reading Matter	do. 1.75
Page Following Reading Matter	do. 1.50
Inside Pages	do. 1.00
Full Page Inside	One Insertion 40.00
Each Subsequent Insertion according to Agreement.	

A Square is One Inch In Depth By Width of Single Column.

Advertisements alone inserted that refer to materials used in the construction and furnishing of houses, and to matters and trades belonging to the building interest.

No Others Received.

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

Weekly Building Edition
OF THE
California Architect & Building News.

FAVORABLE progress is being made towards establishing our WEEKLY EDITION. Extra pains are being taken to collect building information from every portion of the country. The WEEKLY EDITION will be 10x13 inches in size, and ENLARGED AS OCCASION MAY REQUIRE. It will only contain building news and will not, under any circumstances, be used for any other purposes. Positively no advertisements will be inserted. It will be delivered FREE to yearly subscribers of the CALIFORNIA ARCHITECT AND BUILDING NEWS. Thus, for the sum of TWO DOLLARS PER YEAR, you will obtain the WEEKLY BUILDING NEWS, giving you all the latest information, and the CALIFORNIA ARCHITECT, with its twenty-eight pages of interesting matter connected directly with all branches of the building trades, embellished with several pages of illustrations, showing plans for all kinds of city and country houses. Now is the time to subscribe. Remaining numbers of this year given free to all new subscribers for 1888.

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

BALTIMORE, Sept. 27, 1887.

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

Yours respectfully,

C. SYDNEY NORRIS & Co.

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

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

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

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

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

San Francisco Chapter, A. I. A.

THE regular meeting of the Chapter was held on the 7th inst. and was largely attended. President Pissis presided; B. E.

Henricksen, Secretary. After reading an approval of minutes, the reception and payment of bills, and the usual routine of business was transacted, the standing committees made report of progress. The Committee on Fire Ordinances also reported, reciting the facts of the interview with the Committee on the Board

California Architect and Building News,

240 Montgomery Street, San Francisco, Cal.

Published Monthly by the San Francisco Architectural Publishing Co.
On the 15th Day of Each Month.

Established January, 1879.

Weekly Building News,

PUBLISHED EVERY SATURDAY.

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

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

Price of the Two Publications, \$2 per Annum.

Purchasing Agency.

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

OUR BOOK DEPARTMENT.

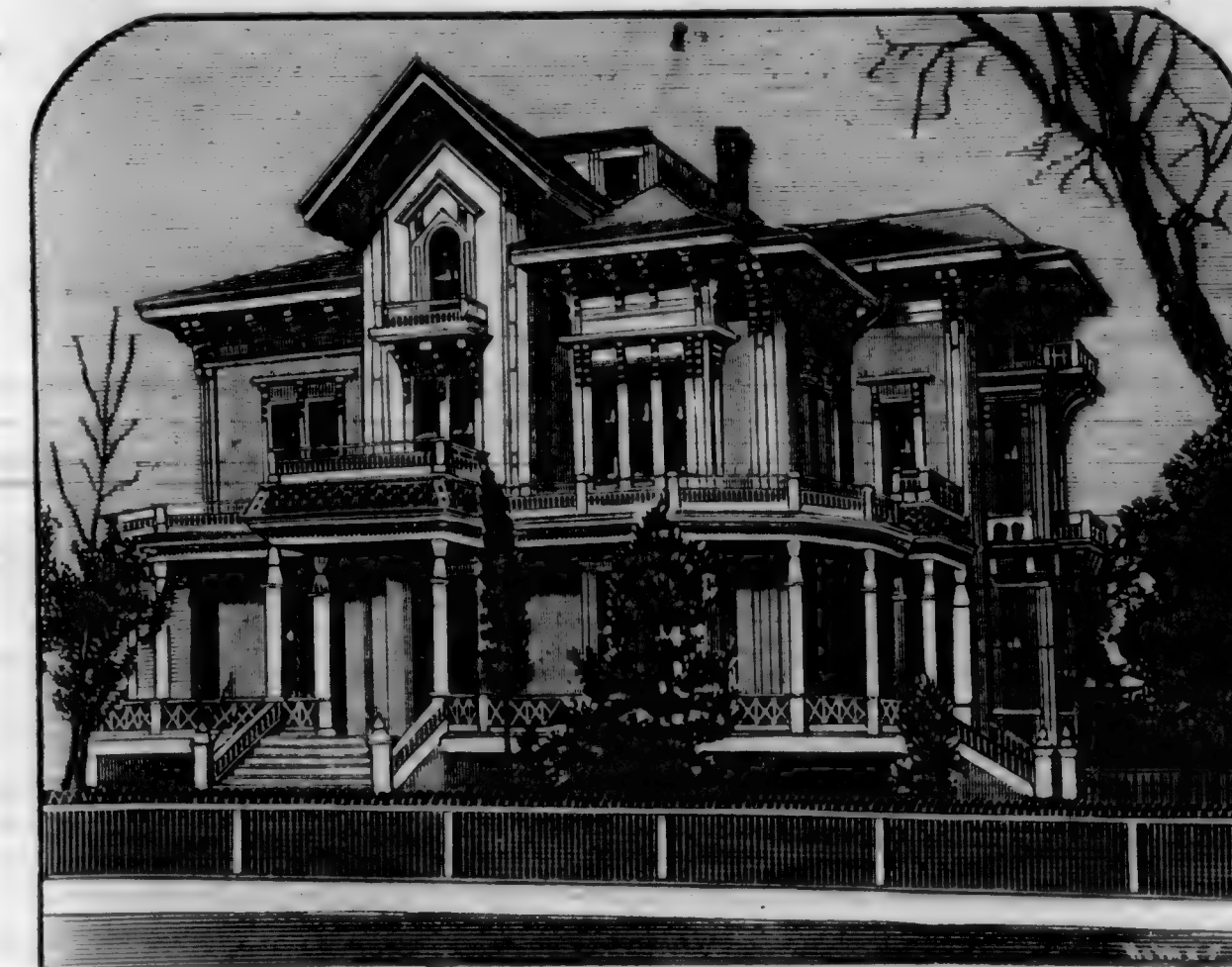
Manual of Industrial Drawing for Carpenters.....	\$2 00	Amateur Mechanic's Workshop.....	\$3 00	Essentials of Perspective.....	\$1 50
Illustrated Drawing Book.....	1 00	Every Man His Own Mechanic.....	3 50	Modern Architectural Designs and Details.....	10 00
Mathematical Drawing Instruments.....	1 50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

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

OCTOBER 15, 1887.]

THE CALIFORNIA ARCHITECT AND BUILDING NEWS.

129



FRONT ELEVATION "WOODLAND" HOME.

A "Woodland" Home.

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

THE HOTEL VENDOME, SAN JOSE.

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

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

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

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

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

The basement will be 9 feet clear, the first story 15 feet high, the second story 12 feet, third story 11 feet, attic 10 feet. The basement will contain dining-rooms for servants, barber shop, fuel and store rooms, bakery, etc.

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

There will be fifty-three rooms on the second floor. Here suites

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

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

In the attic there will be forty rooms.

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

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

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

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

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

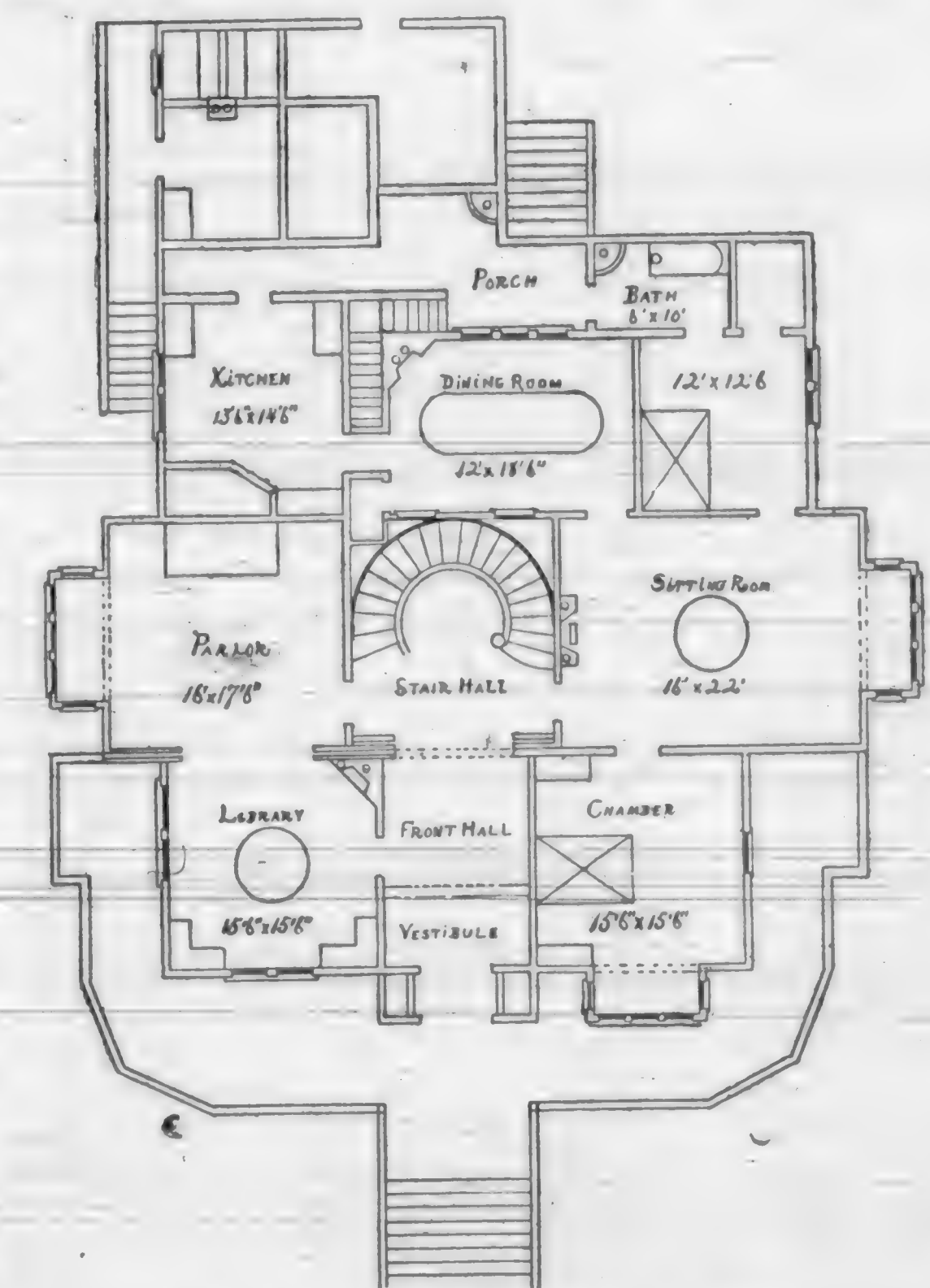
NEW WORKS JUST RECEIVED.

"MANTELS AND SIDE WALLS."

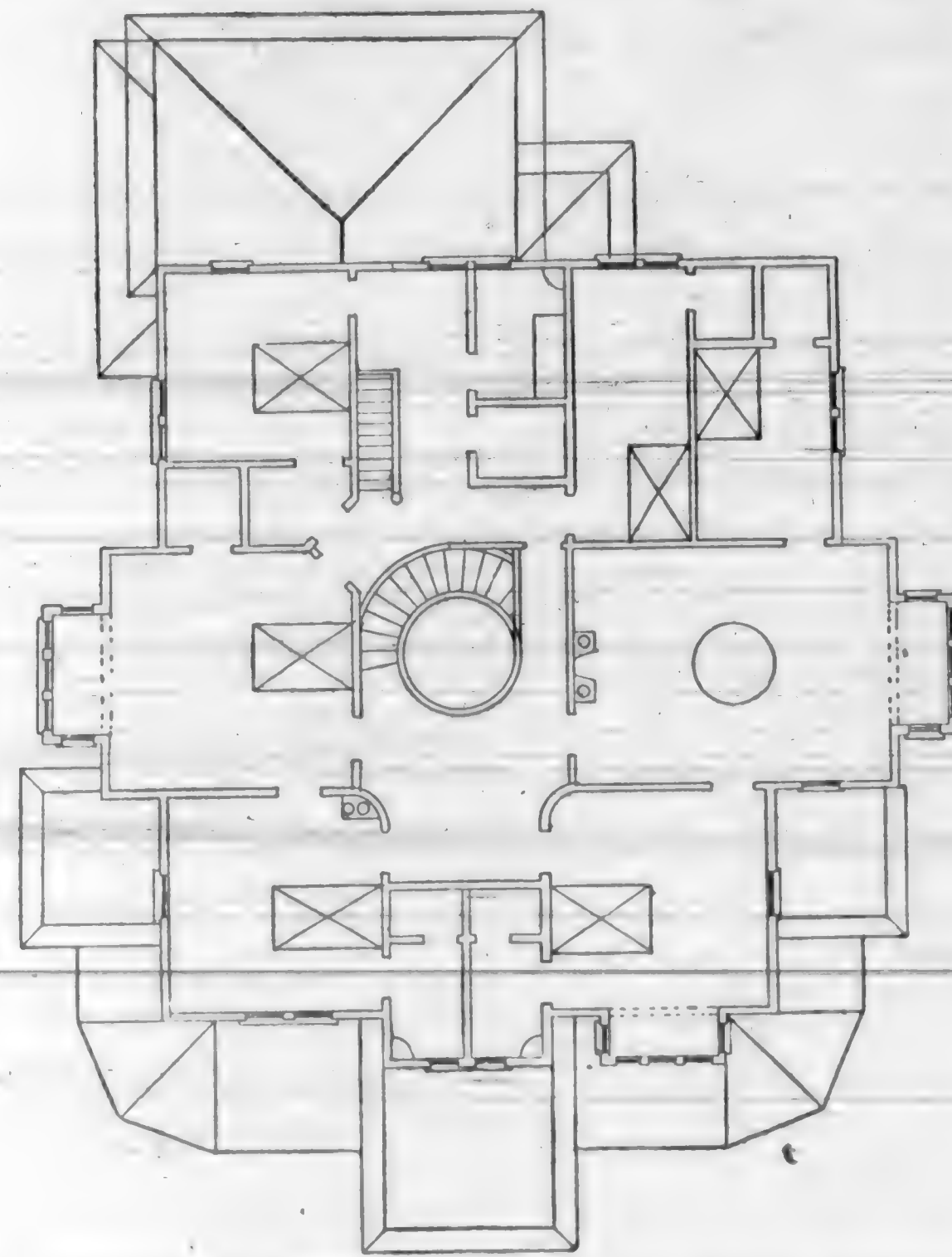
THIRTY-TWO lithographic plates in a portfolio representing designs in the *Cheminée*, Louis XIII., and Louis XVI. styles. Also plates showing various accessories such as mirrors, decorative panels, wainscoting, clocks, etc. These plates are all by the celebrated designer, M. Prignot. Price for portfolio,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

"SHORT HISTORY OF ARCHITECTURE."

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



FIRST FLOOR PLAN "WOODLAND" HOME.



SECOND FLOOR PLAN "WOODLAND" HOME.

Industries in Lumber.

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

lars. The processes of manufacture, therefore, on the whole about double the value. The importance of this interest must steadily increase, and it must grow even more rapidly than the growth of the city.

California Veneers.

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

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

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

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

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

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

"ARTISTIC HOMES."

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

"RECENT PRACTICE IN SANITARY DRAINAGE."

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

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

The New City Hall of San Jose.

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

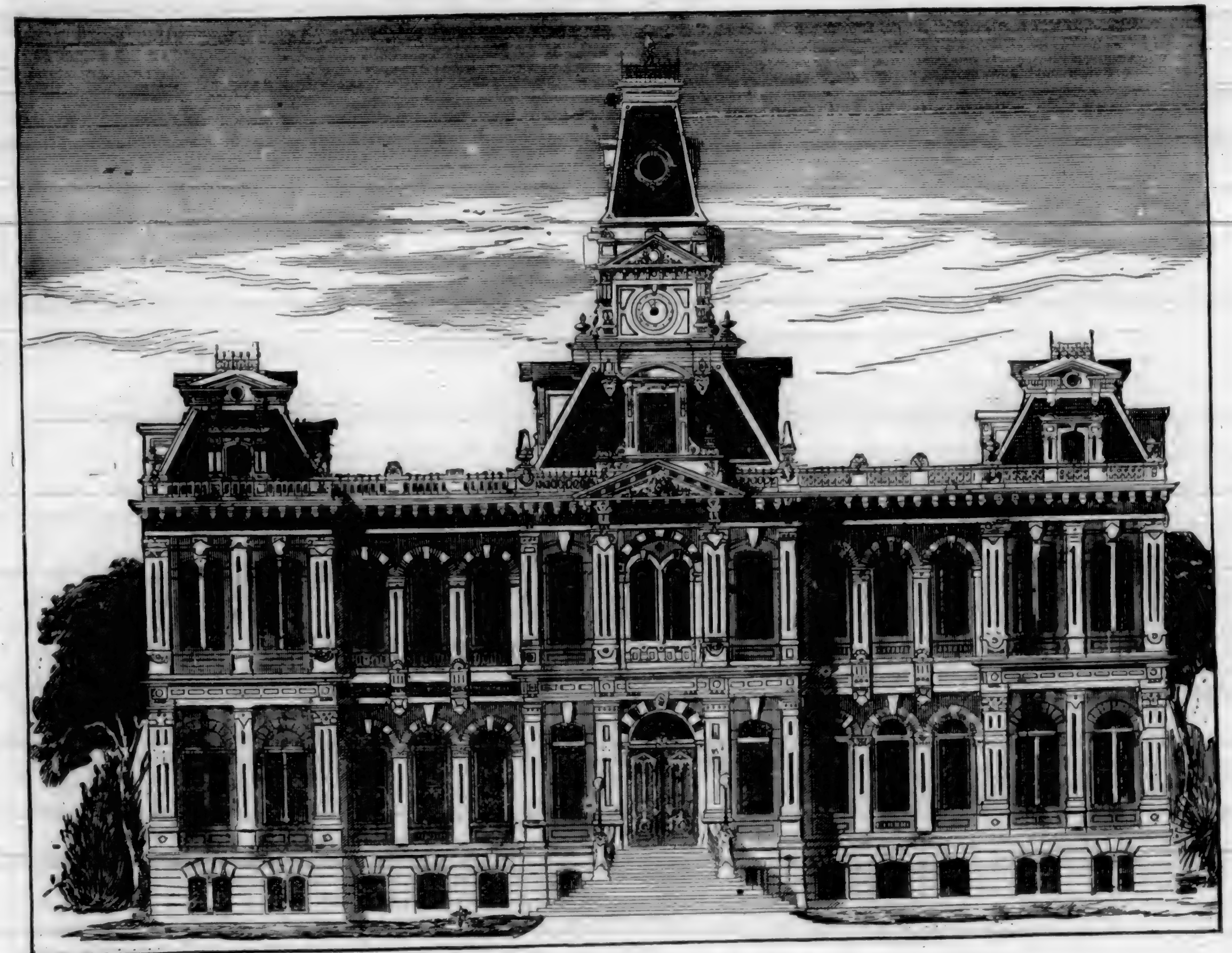
As seen from the engraving, which shows the north or main front, the structure will be two-stories with a basement. In the center of the front will arise the clock tower, and chaste pavilions will ornament the four corners. The finish on the four sides will be similar. The windows are large, with semicircular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

The edifice will be of brick. The basement, laid in the excavation already made, will be of solid masonry plastered on the outside to represent stone work. Above the basement the exterior will be pressed brick, the interlying mortar striped with black

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

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

Should there be a demand for the space the pavilions may each



THE NEW CITY HALL OF SAN JOSE.

putty. The steps to the vestibule, the lower floor, and the coping will be of granite; the water tables, window sills, etc., will be of artificial stone; and the ashlar, cornice, and general trimmings will be of terra cotta. There will be appropriate projections and recesses in the sides so as to avoid sameness and give a symmetrical outline to the whole.

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

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

The first story presents a spacious vestibule and entrance facing Market Street, looking northward, and a side entrance facing

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

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

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

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

The Mechanics' Fair Exhibition.

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

CUT AND ORNAMENTAL GLASS.

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

BRASS BEDSTEADS.

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

TOWNSEND'S "HOUSEHOLD TREASURE."

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

MAHONEY BROS.' RAILROAD CARS.

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

INTERIOR DECORATIONS.

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

KRELING & SONS.

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

MAMMOTH STICK OF LUMBER.

Renton, Holmes & Co. had on exhibition the largest stick of timber ever sawed in a mill. It was 20 by 20 inches in size, 151 feet long, and contained 5,033½ feet. But very few knots could be seen throughout the whole length of the stick.

FIRE HOSE.

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

ABRAHAMSON'S PATENT VENTILATOR.

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

STOVES, RANGES, ETC.

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

sulted by owners who desire to have houses thoroughly heated at a minimum expense.

FINE BUTTS AND LOCKS.

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

SCHUSTER BROS.

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

SIMOND'S SAWS.

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

LUMBER.

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

LIGHTNING SAWS.

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

SUGAR PINE.

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

SONOMA'S LARGE TIMBER.

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

SAN MATEO'S GRAND LUMBER.

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

CALIFORNIA WIREWORKS.

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

HILLS' PATENT BLINDS.

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

HUMBOLDT COUNTY.

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

BUNDY RADIATORS.

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

REDWOOD.

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

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

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

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

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

Now for the contrast. The redwood is felled at any time, mostly when the sap is running and the tree full of life. It is hauled to the mill directly, where, if handy, a vessel lays; piece by piece, as fast as sawed, it is loaded close together in the hold—in the forest to-day, to-morrow at sea in the shape of lumber. Arrived in port, it is sold immediately, or perhaps ordered before it was cut; loaded upon wagons, and built into a house or barn almost instantly. Now it goes there full of sap or life; that dies, decays and rots in the lumber. It is brutalized, murdered, abused most shamefully—not through ignorance, for all mechanics should

know that no well-made lumber is allowed to retain its sap when put to practical use.

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

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

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

Take one quart spirits of turpentine.

Add one pound corn starch.

Add one-fourth pound burnt sienna.

Add one tablespoonful raw linseed oil.

Add one tablespoonful brown japan.

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

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

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

A New California Industry—Inyo Dolomite Marble.



MILL AND QUARRIES, 1887.

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

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

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

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

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

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

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

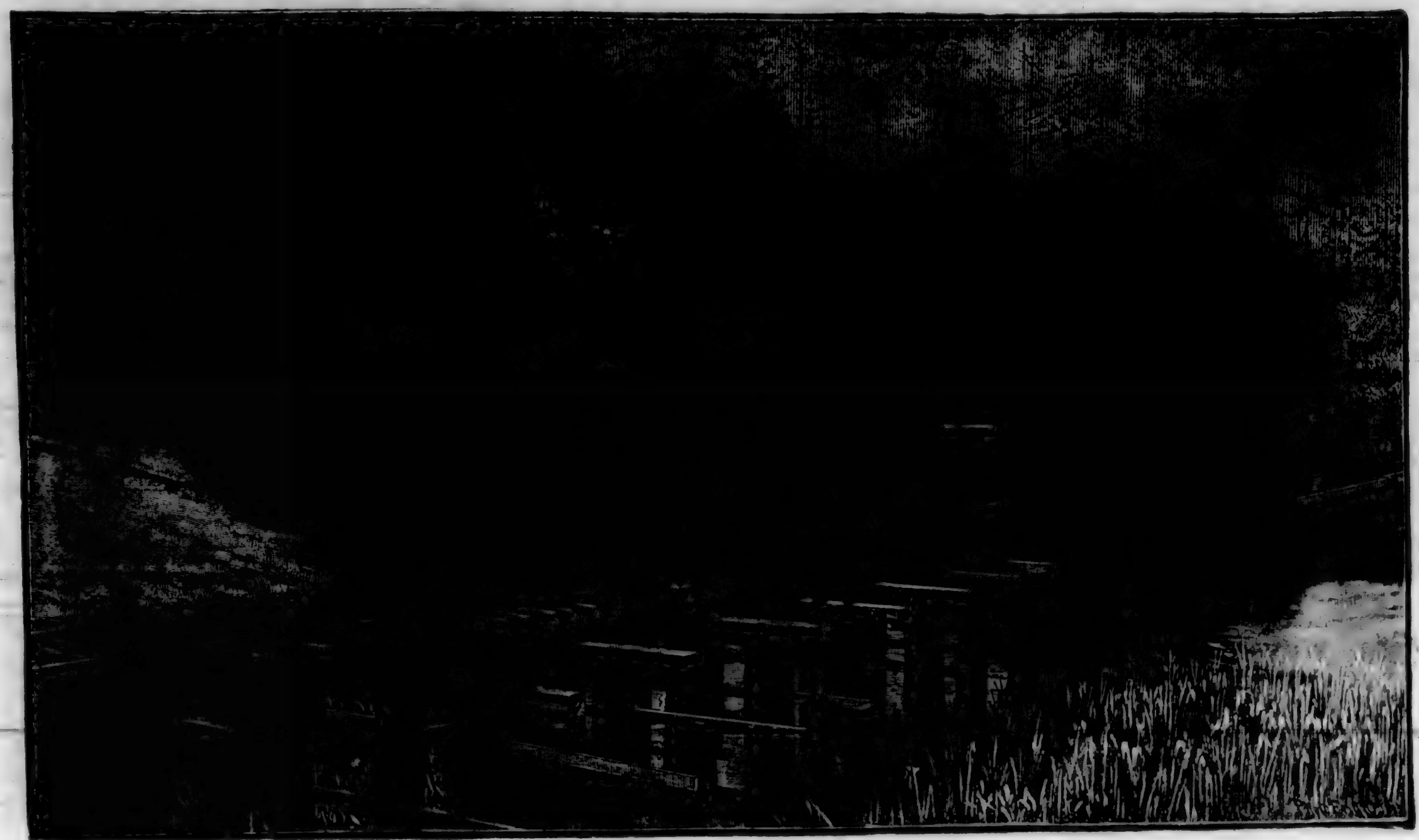
We do not enter the field to provoke competition; we come before the public with a valuable stone, taken from our own mountain-side. We ask no favor beyond its real merit, as compared with similar outside products. We simply ask your patronage, to enable us to open up a great treasure-house of our State,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

THE INYO MARBLE COMPANY OF CALIFORNIA.

Outside Paints.

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

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



REDWOOD LOGGING IN CALIFORNIA.

Redwood and Its Future.

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

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

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

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

Grates, Mantelpieces, Tiling, etc., etc.

THE EXHIBIT OF W. W. MONTAGUE & CO.

THE house of W. W. Montague & Co., Market Street, had without doubt the finest exhibition at the fair. This was on the gallery over the entrance, and occupied quite a large space. It consisted of the latest and most beautiful designs in grates and mantelpieces, with the usual accessories in very handsomely wrought brass, etc. Of these there were a large number exhibited, all differing in design, but all strictly original, and so much the more attractive on this account. In tiling there was an equally good showing, the patterns in this being very unique. The whole exhibit was brilliantly lighted up, and gazing at it one at once realized the fact that it was an art exhibit. Of course to make such an exhibit the house of W. W. Montague & Co. possessed the best facilities. It can take what is required from its stock and never miss them. Each piece shown, however, was representative of a beautiful idea skillfully wrought, and it is therefore not to be wondered at that the display excited far more than ordinary attention. Notwithstanding the beauty of the articles, they are placed reasonably in price, and this is certainly an added merit. This house, in fact, can sell reasonably, it sells so largely, and its expenses are so moderate proportionately. It certainly to-day, in the above, as in its other lines, stoves, tinware, etc., is recognized as the leading house of San Francisco and the coast. In connection with it the following sketch will prove interesting: This house was founded just seven years after the year of the Argonauts, 1849. The city differed widely then from to-day. Fourth and Market was about the limit one way, Stockton the other, while North Beach was the fashionable quarter to a certain extent, although Rincon Hill disputed the sway. There

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

Mr. S. M. Locke dying in 1876, the name was changed to the present style. The old firm occupied the building Nos. 406 and 408 Battery Street. Proving too small for an increased trade, in 1863 a removal was made to Nos. 110, 112, and 114 Battery Street, where subsequently an additional frontage of 145 feet was added to the already large stores. The necessities of greatly enhanced trade compelled still another removal, and the firm had the handsome building Nos. 309 to 317 Market Street, erected especially for it, into which it moved in December, 1883. The new building is 90x137 1/2 feet, six stories high, with a water and damp-proof basement, giving over 70,000 feet of floor surface, every inch of which is required in the various details of business. This great space is crowded with an enormous stock of goods, conveniently arranged, and embracing every known article in the many different lines. The firm manufactures many articles, all of which are noticeable for finish, durability, quality, and workmanship. In 1883 Montague & Co. received the grand prize medal of the Mechanics' Institute for their artistic and superior exhibition of mantels, tiles, and grates, and this was followed in after years by other medals. The growth of this firm is only, in fact, paralleled by the growth of the city and State. Just as population increased so did its business. It made a point of meeting the demand for necessities by furnishing these of superior make and at reasonable charge. It has always been the friend of home industry, and in stoves and ranges made a great endeavor for a home industry, but the time for that had not come. The demand out here was too limited, and the expense was too great. Eastern houses fill a demand ten times greater, so, of course, could undersell. In fact, out here the demand would scarce pay for the patterns for a first-class store. If a firm like this, with channels of trade all over the coast, found difficulty, we may be very sure the time was too early for such an experiment. It now has the agency for the best Eastern articles, but stoves and ranges, however, embrace only one department of its stock. This includes tiling of all kinds, tin plate, sheet iron, iron pipe, house furnishing hardware, plain, japanned, and stamped tinware, etc. Its standing naturally commands it to Eastern manufacturers of prominence, and they are anxious for it to accept their agencies. We have not a doubt it refuses many agencies. What it offers we may certainly conclude are standard. Its immense business now enables it to sell reasonably, and this it certainly does. The fact that it has such a business shows that it satisfies customers. By its reasonable expense, too, in proportion, not much has to be added to first cost of goods.

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

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

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

Remaining numbers of this year given free to all new subscribers for 1888.

HILL'S Patent Inside Sliding Window Blinds,

Are Adapted to any Style of Window,
And Suitable for all Buildings, Dwellings, Stores, Office
Buildings, and for Houses Built to Rent, Hotels,
Boarding or Lodging Houses are
Unexcelled.

They are entirely inside of the window casing, and while requiring no furring out or boxing, make it an impossibility to tear curtains, interfere with plants or window ornaments, or become broken by contact with chairs or other movable articles.

The light can be admitted and sunlight excluded from any part of the window; can be instantly removed and taken to any part of the house to clean and as easily replaced.

They can be opened or closed with the window raised, and without removing articles from the window-sill, and cannot blow open or rattle. The blind is very light (one-half inch in thickness) and strong, possessing more durable qualities than a hinged blind one inch in thickness.

There is no sagging, hanging, or getting out of order.

They are made in three sections in height (each section sliding past the others), and any number of divisions in width corresponding to the folds in the old-fashioned folding blinds. They require no hinges—all trimmings furnished with blinds—are made of all woods, finished or unfinished.



The Blind manufactured throughout the United States and Canada by the members of the HILL SLIDING BLIND ASSOCIATION, is the only sliding blind ever put into practical and general use, or that has been adopted and used by the leading architects and builders, both East and West.

It is rapidly displacing the objectionable folding blind, also shades, which since they have ceased to be considered the fashion, are used principally in cheap dwellings and tenements.

The Hill Blind is the only sliding blind made of white cedar, and where the grooved slide can be used as the window stop, or placed on the pulley stile, similar to the ordinary stop—"the slide is only 2 1/2 inches wide" plenty of room can be obtained by setting the casing flush with the pulley stile, in light studded buildings. NOTE.—Any other sliding blind using the slide as the stop for the sash, is an infringement of our patents of February 26, 1884, and February 24, 1886, and anyone selling, using, or making such a blind will be prosecuted by the HILL SLIDING BLIND ASSOCIATION, as they are determined to stop the sale of several cheap and worthless imitations.

The Hill Sliding Screen, working the same as the blind, is the only screen covering one-half of the window, which will remain at any desired point, and which can be instantly removed, when not required, or to clean the windows.

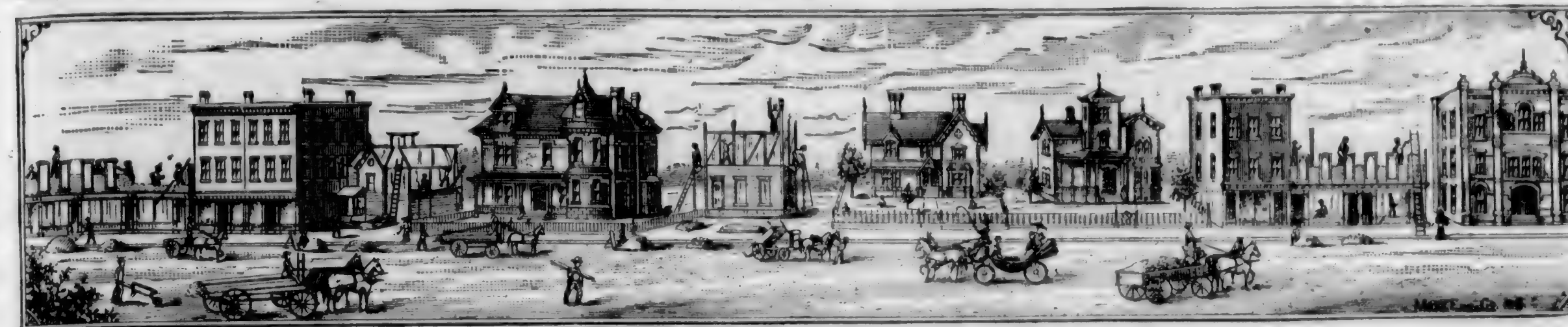
Over eight thousand sets have been specified and put in, throughout the Pacific Coast, since April 1, 1885.

We refer to the following prominent architects of San Francisco, who have used or specified the Hill Blind and Screen; also hundreds of owners throughout the Pacific Coast:

Miller & Armitage, Pless & Moore, H. D. Mitchell, John Marquis, John M. Curtis, Moore & Schultze, J. T. Kidd, J. H. Humphreys, T. J. Walsh, Jas. E. Wolfe, Townsend & Wycken, Chas. J. Devlin, Geo. E. Voelkel, Copeland & Banks, M. Balczynski, Edw. R. Swain, Chas. V. Pierce, S. & J. C. Newsom, Wm. Mooser, Chas. Geddes, Macy & Jordan, H. T. Bestor, A. A. Bennett, Salfeld & Hohlberg, A. J. Barnett, John J. Clark, G. V. Capelletti, P. R. Schmidt, M. P. Schetzler, Clinton Day.

HINDES & MURRAY,
Main Office and Factory, 411 Mission Street, Corner of Fremont.

Sole owners of the right to SELL and MANUFACTURE for the Pacific Coast, except Counties of San Diego, Los Angeles, San Bernardino, Santa Barbara, Kern, San Luis Obispo, and Ventura in California.



OUTSIDE THE CITY.

COUNTRY BUILDING INTELLIGENCE

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

Bakersfield.

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

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

Chico.

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

Los Angeles.

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

Lake Tahoe.

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

Oakland, Alameda, and Vicinity.

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

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

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

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

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

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

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

THE SATHER BUILDING.

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

OAKLAND BUILDINGS.

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

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

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

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

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

EAST OAKLAND BUILDINGS.

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

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

Charles J. Gaillard is building a cottage for W. G. Reese on East Twentieth Street, between Seventh and Eighth Avenues, to cost \$1,550.

S. T. Higgins & Sons are building for Mrs. M. C. Littlejohns a cottage on Tenth Avenue between East Twenty-fourth and East Twenty-fifth Streets, to cost \$1,671.

The East Oakland Methodists intend building a church on Eighth Avenue and Seventeenth Street soon.

P. S. Glasford is having a \$1,700 cottage built on the Hillgas Tract, Berkeley, by C. R. Lord.

J. S. Greenleaf is having a house built by Woodhouse & Sandy at Klinknerville, to cost \$2,300.

Knowles & Wetmore will build for L. Georges a house at Fruit Vale, to cost \$2,700.

J. J. & T. D. Newsom are the architects.

J. B. Cogswell has agreed to erect a house for Mrs. H. Gross in Berkeley to cost \$3,100.

Percy & Hamilton are the architects. Goodrich & Newlon have received orders from M. B. Strelinger to advertise for bids on his house to be erected in Berkeley.

A. H. Broad has agreed to do the carpenter work on a building for A. Carlisle, on the corner of Vine and Spring Streets, Berkeley. The contract price is \$2,720.

Petaluma.

A planing mill is being erected on the corner of C and Second Streets.

Portland, Or.

A. J. Cooper, a Chicago capitalist, offers to build a \$700,000 hotel if the citizens give him \$250,000.

Permits have been granted for construction of a one-story frame dwelling on the corner of Sixteenth and M Streets, for J. Connor, to cost \$2,200; two one-story frame dwellings on the corner of Lowndale and Clay Streets for Mrs. Rice, to cost \$2,200, and a three-story frame dwelling on the corner of Tenth and Mill Streets, for R. P. Earhart, to cost \$8,500.

Work will be commenced in a few days on the building of the cyclorama of the Battle of Gettysburg. It will be located on the corner of Third and Pine Streets.

W. S. Ladd has started the subscription for the new hotel project with \$25,000.

A three-story brick addition is to be made at once to the rear of the *Oregonian* office building, and another story added to the main structure. The cost will be about \$10,000.

Charles H. Dodd has ordered the construction of a four-story brick block, 75x80 feet, on the southeast corner of Front and A Streets, to cost \$60,000.

A two-story frame dwelling is to be built on D Street, between Twelfth and Thirteenth, for P. W. Gillette, to cost \$2,000.

Chas. H. Dodd has been granted a permit to build a four-story brick block on the corner of Front and A Streets, to cost \$75,000.

A Methodist Church is soon to be built at Burns, to cost about \$1,200.

Baker City has voted to issue \$30,000 in bonds to build a new school-house.

Riverside.

A. W. Boggs has secured the contract for the foundations of the Rubidoux Hotel. J.

C. Pelton was the successful competitor for preparing plans, etc.

Sacramento.

J. Street, bet. Eighth and Ninth. Two-story and basement residence. Owner, John Sheeren; architect, N. D. Goodell; contractors, Bohn Brothers. Cost, \$1,000.

G Street, bet. Ninth and Tenth, two-story and basement residence. Owner, Mrs. Ellen Manning; architect, N. D. Goodell; contractor, B. F. Bell. Cost, \$3, 00.

Capital Hotel, cor. K and Seventeenth Streets, alterations and additions. Owners, Blessing & Guthrie; architect, N. D. Goodell; contractors, Carle & Croly. Cost, \$9,000.

J Street, bet. Ninth and Tenth, alterations and improvements. Owner, L. Elkus; architect, N. D. Goodell; contractors, Bohn Brothers. Cost, \$1,200.

J Street, cor. Seventh, improvements and additions. Owner, T. M. Lindley; architect, N. D. Goodell; contractor, W. M. Reese. Cost, \$10,000.

San Jose.

There will doubtless be more building done this fall than at any previous period in the history of San Jose. Among those who propose to erect residence buildings at once, are the following: Eugene Rosenthal, a handsome residence on his lot on Julian Street, between Third and Fourth. G. R. Jones, of Montreal, Canada, residence on Union Avenue, at a cost of \$8,900. H. A. Hughes, lately from the East, a neat cottage on North Sixth Street, at a cost of \$4,000.

C. D. Smith, of the firm of Kaufman, Smith & Hensley, has recently purchased a very desirable lot on Sixth Street, and has contracted for the erection of a fine dwelling.

G. N. Hensley, of the same firm, residence on Sixth Street.

W. S. Kaufman, the third member of the firm, fine dwelling on Third Street.

Theodore Lenzen is supervising the construction of a new residence on the Quinn Ranch, one on the Parr Ranch, one in Alviso, and a three-story hotel and an Odd Fellows' hall at Salinas. P. E. Bussell is completing the plans for a cottage on Lenzen Avenue for X. E. Burns, and also a plan for a \$30,000 residence for an Eastern gentleman who recently purchased in this city.

Three cottages will soon be erected on the Lendrum Tract, in East San Jose, by William Winter, a San Francisco capitalist. Other San Francisco men propose to build here soon.

F. Brassy and Henry Ahlers have let to A. Kelsey, the well-known builder, a contract for the construction of two handsome residence houses at the corner of McLaughlin and Lick Avenues, in the Brassy & Ahlers addition to East San Jose, the price being \$7,000 each.

Messrs. Brassy & Ahlers will build also another house close to the others, to cost \$4,500, and the contract for still another will be let in a few days, making four handsome houses in all. San Jose is to be congratulated upon having two such energetic and enterprising men.

CONTRACTS LET.—Contracts have been let by Architect G. W. Page for the completion of the fourth story of East Hall of the University of the Pacific. A. J. McIlvain has the contract for \$737.

A contract by the same architect has been made with J. J. McDaniels, for changes and additions to the building of the Home for Feeble-minded Children, for \$2,700.

A third contract has been let to W. J. Wolcott for excavating and laying the foundation for the Conservatory of Music Chapel of the University of the Pacific for \$3,227.

The following bids for building the new City Hall were opened:—

J. D. Stewart, common bricks, \$112,654; pressed, \$117,350; sandstone trimming, extra.

P. R. Wells, common; \$112,000; pressed, \$117,000.

Thos. Livingstone, common, \$112,000; pressed, \$117,500.

A. J. McIlvain, common, \$114,500; pressed, \$117,000.

Chas. Turel, San Francisco Co., common, \$115,999; pressed, \$119,999.

Albert Washburn, San Francisco, common, \$116,881; pressed, \$121,881.

Thos. Flynn offered to do the sandstone work if called for, at \$7,825.

The contract was awarded to P. R. Wells and his bonds fixed at 25 per cent of the amount of his bid.

The total cost of the New City Hall will be as follows:—

F. Altman, cast-iron work, \$1,890 00

F. Kuchelbeiser, wrought-iron, 5,890 00

Combs, Blanchard & O'Neil, granite, 5,180 00

Contracts already let, \$12,050 00

P. R. Wells, brick and lumber work, 117,000 00

Vaults, etc., 3,000 00

Heaters, four, 2,000 00

Electric Wires, 250 00

Elevator, 250 00

Total, \$135,450 00

Architect's services, 3 per cent, 4,062 60

Sum total, \$139,512 60

Mrs. Mabury will build a \$10,000 dwelling. P. R. Wells, contractor; Theo. Lenzen, architect.

N. D'Oyly is building a \$12,000 dwelling from plans prepared by his architect, Theo. Lenzen. Thomas Livingston is contractor.

Theo. Lenzen has prepared plans for twelve brick buildings for New Chinatown. E. Base is contractor; \$6,000 will cover the cost.

Six miles from town E. N. Parr will build a \$5,000 dwelling. Theo. Lenzen is his architect; F. Davis, contractor.

One mile from town R. Wiltz is building a \$4,500 dwelling. Theo. Lenzen, architect; Nickelson, contractor.

C. Lefranc, seven miles from town, is making large additions to his wine cellar. Theo. Lenzen, architect; G. E. McDougall, contractor.

San Rafael.

San Rafael Hotel. Three-story frame. Owner, San Rafael Hotel Company; architects, Curlett & Cuthbertson; contractor, Plereighton. Cost, \$80,000.

Turlock.

San Strauss, of Turlock, has just purchased a piece of property near that town, and will immediately commence the construction of a \$4,000 residence. James E. Wolfe, of San Francisco, is his architect.

Winters.

E. J. Englehardt is erecting a two-story frame to cost about \$6,000. A. Ritchie is the architect and builder.

Judge Wm. Sims is having a two-story residence built. Gilbert & Son, of Woodland, are architects; R. B. Nissen, of Capay, contractor. Cost, \$4,000.

T. D. Ball is superintending repairs on Mrs. D. Hemenway's residence.

W. J. Pleasants (seven miles from town) is spending about \$2,500 in improvements.

A large force of men are grading on the Winters and Ukiah Railroad.

Most of the business firms of the town are having artificial stone sidewalks laid.

Miscellaneous.

It is estimated that it will require 11,000,000 feet of lumber to erect the buildings already under contract at San Carlos City, Lower California.

The stone foundation for the new school-house at Rutherford has been laid, and contracts for the carpenter work will soon be open.

The rock foundation for the new Catholic school in St. Helena is completed, and work begun on the frame work.

Bassett Brothers, contractors and builders, have commenced work on the frame work of the Catholic College.

J. E. Whitson, of Selma, will soon let the contract for the building of his \$30,000 hotel in that town.

The new County Hospital in Fresno City will cost \$12,000. J. W. Bones is preparing plans and specifications.

J. H. Hamilton, of Fresno, is building a cottage on I Street, north of El Dorado Street.

Contractor Morrison, of Tacoma, was recently awarded the contract for building the addition to the Court House. The bid was \$971.

The contract of building the superstructure of the Methodist Church in Seattle, and finishing up the basement, was let recently to Moses Keezer for \$15,000.

The S. P. R. R. Co. are making arrangements to build a large, commodious new depot at Sumner. The old one will be used exclusively for freight.

THE LOS GUILUCOS HOTEL.

Thomas J. Ludwig states that he has closed the contract for the erection of a \$11,000 hotel at the town site of Los Guilucos, and that work will soon be commenced. Teams have commenced hauling brick and lumber for the foundations.

ANAHEIM'S HOTEL—CONTRACTOR SCHINDLER SOON TO BEGIN WORK.

The contract for the cement sidewalks on the tract has been awarded to the Los Angeles Paving Company, of which Mr. E. A. Saxton, formerly of Anaheim, is manager. They expect to put a number of men at work shortly. Mr. Charles Schindler, who has the contract for the brick work, has received the foundation plans, and will start his men at work very soon. Directors Goldthwaite and Kroeger have the superintendence of the work of curing for the tract, grading streets, etc., and they are getting ready to make some wonderful improvements in the property.

PLANS APPROVED.

A meeting was held recently of the State Board of Examiners, Governor Waterman presiding, and Trustees Gally and Cuning-

ham being present. The plans and specifications for the erection of three new wards at the hospital, and for furnishing the building, were submitted to the Board of Examiners by Messrs. Cunningham and Gally, and unanimously approved by the Board.

WORK ON THE SAN JOSE NEW CITY HALL.

The work on the New City Hall will be commenced at once. Sunday a cargo of cement arrived in San Francisco, and the amount necessary for the building here has been obtained by Daunes & Van Doren. The sewers will be laid first and then the foundations will be pushed forward. The sub-contractors are as follows: W. J. Wolcott, brick work; L. C. W. Otto, artificial stone and cement work; W. W. Montague, tiling; M. Lenzen, painting; W. P. Dough-

erty, mill work; John Stock & Sons, plumbing and tinning.

The contracts for the erection of a depot at Carlsbad and Encinitas were let, recently, by the California Southern Railroad Company, to F. M. Johnson, the contractor of the Barstow depot.

Architect Pugh, of Salem, is now engaged in making preliminary drawings of the proposed new Court House of Benton County. The building will cost \$55,000, and will be in the Ionic style of architecture, and be of brick and stone. It will be built in 1888.

Fred E. Snider is building a handsome residence on Eighth Street in Seattle, to cost \$12,000.

The Donahue Road will erect a new station in Coleman's Magnolia Tract, near Grant Avenue, San Rafael.

Architect Theo. Lenzen is in Salinas superintending Jeffery's new hotel. It is a three-story brick building, and will cost \$20,000.

The Odd Fellows are erecting a \$12,000 hall in Salinas. Theo. Lenzen has prepared the plans.

Mrs. Tilder is having built a \$7,000 dwelling in Alviso. W. S. Boyles is the contractor, Theo. Lenzen, architect.

Near Dixon, Solano County, Cal., two-story and basement residence. Owner, J. F. Brown; architect, N. D. Goodell; contractor, B. F. Bell. Cost, \$8,000.

SAN FRANCISCO BUILDING NEWS.

A
Army, nr. Guerrero. One-story frame.
O. and B.—Comerford.
\$1,400.

B
Brannan, nr. Fourth. Additions.
\$8,000.

Broadway, cor. Dupont. Three-story frame.
O.—V. Menisini.
A.—Cappelletti.
C.—J. G. Adams.
\$10,000.

Broderick, cor. Sacramento. One-story frame.
\$1,000.

Bush, cor. Scott. Two two-story frames.
O.—D. Lohson.
C. and B.—W. Bluns.
\$9,000.

C
California, nr. Laguna. Additions.
O.—T. Whitely.
A.—Huerne & Everett.
C.—McCready Bros.
\$1,200.

California, nr. Front. Additions to brick building.
O.—S. L. Jones & Co.
A.—Macy & Jordan.
Carp.—Bateman Bros.
Mason—Dunbar & Morrell.
\$17,000.

California, cor. Devisadero. Two-story frame.
O.—Geo. H. nkle.
Day work.
\$6,500.

Capp, bet. Twenty-fifth and Twenty-sixth. One-story frame.
O.—Doyle.
C.—Sullivan.
\$1,700.

Capp, nr. Twenty-fifth. Additions.
\$1,000.

California, corner Devisadero. Two-story frame.
O.—George Hinkle.
Day work.
\$6,500.

Clay, cor. Laguna. Two-story frame, basement and attic.
O.—Irving Scott.
A.—Matthews & Son.
C.—Littlefield.
\$10,000.

Columbia, bet. Twenty-fourth and Twenty-fifth. St. Peter's Convent.
O.—Sisters of Mercy.
A.—J. J. Clark.
C.—Degan & Orford.
\$5,000.

D
Davis, cor. Vallejo. One-story frame.
O.—Coos Bay Coal Co.
\$1,200.

Davis, cor. Vallejo. Coal Bunker.
O.—Coos Bay Coal and Navigation Co.
C.—San Francisco Bridge Co.
\$15,000.

Dolores, nr. Twenty-sixth. One-story frame.
O. and B.—R. Bergfeld.
\$2,000.

Dupont, nr. Sacramento. Additions.
\$500.

E
Eddy, cor. Van Ness ave. Two-story frame, basement and attic.
O.—Frattinger.
A.—R. R. Schmidt.
C.—P. Griffin.
\$11,000.

Eight Avenue, nr. Point Lobos Road. Star of the Sea Church.
O.—Father McGinty.
A.—Charles Devlin.
C.—J. Blake.
\$10,000.

Eighteenth, nr. Douglass; one-story frame.
O.—W. Richter.
C.—A. Discher.
\$1,500.

Eighteenth, nr. Castro. One-story frame.
O.—F. Reusche.
A.—P. R. Schmidt.
C.—F. Elam.
\$2,800.

F
Fillmore, cor. Sacramento. Alterations.
O.—Schroeder & Bohman.
Day work.
\$1,500.

Fourteenth, nr. Belcher. One-story frame.
\$1,200.

G
Garden, nr. Harrison. Additions.
\$1,000.

Gilbert, nr. Bryant. Additions.
\$700.

Golden Gate Avenue, cor. Octavia. Two two-story frames.
O.—Wm. John.
A.—John & Zimmerman.
C.—B. Dreyer.
\$7,000.

Guerrero, nr. Twenty-sixth. Two-story frame.
\$4,500.

Grove, bet. Gough and Octavia. Two-story frame.
O.—G. Ehrman.
A.—W. H. Armitage.
C.—L. Weisman.
\$6,500.

H
Howard Court, nr. Fourth. Repairs.
\$1,300.

Howard, nr. Thirteenth. Two-story frame.
O.—A. Johnson.
A.—John & Zimmerman.
C.—Schutt & Kreeker.
\$3,200.

I
Industrial School. Frame building for barn.
C.—H. Simmons.
\$2,500.

Iowa, nr. Ropewalk. One-story frame.
O.—L. Meyer.
\$1,500.

Iowa, nr. Solano. Two-story frame.
O.—Annie Hook.
C.—C. E. Dunshee.
\$3,500.

J
Jackson, bet. Montgomery and Sansome. Alterations.
O.—D. Ghirardelli.
A.—W. Mosser.
C.—J. W. Wessinger.
\$4,000.

Jackson, cor. Mason. Alterations.
O.—J. Frank.
A.—Salfeld & Kohlberg.
C.—L. Weisman.
\$7,000.

L
Laguna, bet. Clay and Sacramento. Two-story basement and attic frame.
O.—Earls.
A.—Matthews.
C.—Littlefield.
\$10,000.

Larkin, nr. Chestnut. Frame building.
O.—W. Perry.
A.—G. A. Bordwell.
C.—B. F. Ellis.
\$1,500.

M
Minnesota, cor. Solano. Three-story frame.
O.—J. Mooney.
A.—Townsend & Wyneken.
C.—C. E. Dunshee.
\$4,500.

Mission, nr. Ninth. Repairs.
O.—W. A. L. Miller.
\$500.

Mississippi, nr. Solano. One-story frame.
O.—Burglas.
C.—Meade.
\$1,000.

Minna, nr. Fourteenth. Frame dwelling.
O.—J. Warren.
C.—G. Houston.
\$1,600.

Market, bet. Fourth and Fifth. Alterations of old St. Ignatius Church into theater building.
\$2,500.

Montgomery, nr. California. Repairs.
\$1,200.

N
Natoma, nr. Fifth. Three-story brick.
O.—J. F. Boyd.
A.—McDougall & Son.
C.—A. G. Fitzpatrick.
\$45,000.

P
Pacific Avenue, nr. Fillmore. Two-story frame.
O.—Mrs. M. E. Green.
A.—Percy & Hamilton.
C.—Gray & Stover.
\$8,000.

Pacific Avenue, nr. Gough. Five two-story frames.
O.—J. J. Hall.
A.—S. & J. C. Newsom.
C.—Knowles & Wetmore.
\$15,000.

Page, bet. Gough and Octavia. Two-story frame.
O.—H. Dickerson.
C. and A.—J. P. Chadwick.
\$4,000.

Pierce, nr. Haight. Two-story frame.
O.—M. A. Eddleman.
C.—J. Rountree.
\$1,500.

Protrero Avenue, bet. Twentieth and Twenty-first. One-story frame.
O.—A. Pringle.
C.—C. O. Smith.
\$2,000.

Powell, nr. Greenwich. Additions.
O.—B. Higgins.
A.—B. J. Clinch.
C.—T. O'Donnell.
\$2,500.

Quincy Place, nr. California. One-story brick.
O.—E. Garner.
C.—Schoenmacher.
\$2,200.

S
Sutter, nr. Taylor. Additions in rear.
\$1,000.

San Jose Avenue , nr. Twenty-seventh. Two-story frame. O. and B.—J. Comerford. \$3,000.	Sierra , nr. Kentucky. One-story frame. O. and B.—Keenan. \$1,000.	Thirtieth , nr. Noe. Two-story frame. O.—Pope. \$3,500.	V
Sansome , nr. Sacramento. Additions. O.—Palmer & Rey. A.—Macy & Jordan. C.—J. E. Kelly. \$6,000.	Sixth , nr. Harrison. Two one-story frames. O.—J. Holjes. C.—Munster. \$3,000.	Treat Avenue , nr. Twenty-second. Frame building. O.—Oliver Madison. A.—M. J. Welsh. C.—Chisholm. \$4,500.	W
Sacramento , bet. Laguna and Buchanan. Two-story frame, basement and attic. O.—R. C. Chambers. A.—Matthews & Son. C.—Littlefield. \$10,000.	Solano , nr. Iowa. Two-story frame. O.—Annie Hook. C.—C. E. Dinshee. \$3,500.	Twenty-sixth , nr. Dolores. One-story frame. O. and B.—J. I. Comerford. \$1,600.	Washington , bet. Gough and Octavia. Two-story frame. O.—P. G. Sabatie. A.—Pississ & Moore. C.—Jas. Geary. \$6,500.
Sanchez , nr. Seventeenth. Two-story frame. O.—J. G. Hill. C.—J. C. Gillespie. \$2,500.	Tennessee , nr. Solano. Five one-story frames. O.—Reis. C.—R. O. Davis. \$5,000.	Union , nr. Franklin. Frame school. O.—City of San Francisco. A.—T. J. Welsh. C.—P. B. McKay. \$18,440.	Y
	Tennessee . Additions to St. Thomas' Church. \$1,000.	York , bet. Twenty-fifth and Twenty-sixth. Five one-story frames. O.—Dr. C. C. O'Donnell. Day work. \$4,000.	

Provincial Royal Jubilee Hospital.

TO ARCHITECTS.

Designs, Plans and Specifications are invited for the above building in accordance with memorandum of particulars, copies of which, together with contour plans of the site, may be obtained on application to the undersigned. A premium of \$800 will be paid for whichever designs and plans, if any, may be adopted. Such designs, plans and specifications to become the property of the Provincial Jubilee Royal Hospital Building Committee.

Plans for this building to be addressed, in sealed envelope, to the undersigned, and to be handed to him by or before noon of the 7th of December next.

WILLIAM CHUDLEY, Hon. Secretary,
Sept. 13, 1887. Wharf St., Victoria.

CIVIL ARCHITECTURE,
A SPLENDID WORK,
PRICE, \$10.00.

Lumber Market.

The retail price list of the California Lumber Exchange for September 2, 1887, is as follows:

Pine, Rough, per M feet.....	\$22 50
Pine, Rough, No. 2.....	18 50
Pine, Rough, 30 to 50 feet lengths.....	23 50
Pine, Rough, 50 to 60 feet lengths.....	24 50
Pine, Rough, 60 to 70 feet lengths.....	25 50
Pine, Selected.....	26 50
Pine, Clear.....	33 50
Pine, Fire Wood.....	10 00
T. & G. Flooring, 1x6.....	35 00
T. & G. Flooring, 1x6, 1x4, 1x4, and narrow.....	40 00
T. & G. Flooring, No. 2.....	29 50
Stepping, No. 2.....	45 00
Redwood, Rough.....	32 50
Redwood, Rough, No. 2.....	18 50
Redwood, Surfaced.....	37 50
Redwood, T. & G. 6 in., 12 feet and over.....	34 00
Redwood, T. & G. 6 in., 7 to 11 feet.....	27 00
Redwood, T. & G. 6 in., under 7 feet.....	24 00
Redwood, Rustic.....	37 50
Redwood, Rustic, No. 2.....	32 50
Redwood, T. & G. Beaded, 12 feet and over.....	36 00
Redwood, T. & G. Beaded, 7 to 11 feet.....	27 00
Redwood, T. & G. Beaded, under 7 feet.....	24 00
Redwood, Siding, 4 in.....	25 00
Pickets, Fancy.....	26 00
Pickets, Rough Pointed.....	19 50
Pickets, Rough Square.....	17 50
Shingles.....	2 25
Laths, 1x.....	4 00
Laths, 1x.....	4 50
Furring, 1x2, per lineal foot.....	01
Battens, 1x3, per lineal foot.....	01

SPECIFICATIONS.

We have on hand a supply of a

NEW FORM OF SPECIFICATIONS.

Especially adapted for the Pacific Coast.

We will send a Copy to any address upon receipt of 50 cents, or \$5.00 per dozen.

Also Palliser's new Specifications, just received.

We can supply any number of either the above

CARPENTRY
MADE EASY.

By Wm. E. Bell, a practical mechanic, who fully appreciates, from personal experience, that there are many things perplexing to under taud and difficult to do until they are fully explained and tested. It is designed to make the science and art of carpentry clear and comparatively easy to all who require information on the subject. Price, \$2.00 by mail, prepaid.

Manual of Industrial Drawing for Carpenters.....	\$2 00
Illustrated Drawing Book.....	1 00
Mathematical Drawing Instruments.....	1 50
Drawing for Carpenters.....	1 75
Shavings and Saw Dust.....	1 50
Linear Drawing.....	1 50
Practical Draughting.....	1 00
Drawing for Cabinet Makers.....	1 50
Handrailing and Staircasing.....	1 50
Painter, Gilder, and Varnisher.....	1 50
Water Closets.....	1 00
Sewer Gas.....	1 25
Steam Engine Catechism.....	1 00
Paper Hanger's Companion.....	1 25
Builder's Guide.....	2 00

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

THE CALIFORNIA ARCHITECT AND BUILDING NEWS.

VOLUME VIII.

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

NUMBER 11.

THE
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Established January, 1879.

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OUR ADVERTISING RATES.

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Page Preceding Reading Matter.....	do. 1.75
Page Following Reading Matter.....	do. 1.50
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Full Page Inside.....	One Insertion 40.00
Each Subsequent Insertion according to Agreement.	

A Square is One Inch In Depth By Width of Single Column.

Advertisements alone inserted that refer to materials used in the construction and furnishing of houses, and to matters and trades belonging to the building interest.

No Others Received.

SAN FRANCISCO, CAL., NOV. 15, 1887.

Weekly Building News.

Before the next issue of this journal, subscribers will have received the first number of the weekly supplemental issue of this journal. Please bear in mind that it will only contain building news, and will be used for no other purpose. Positively no advertisements inserted. In size it will be $9\frac{1}{2} \times 14$, or same as one page of this journal. It will be printed on same quality of paper, and will be furnished FREE to all subscribers to the "California Architect."

TERMS--Two Dollars per year for both publications.

Office, 240 Montgomery St., San Francisco.

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

Twenty-first Annual Convention of the American Institute of Architects.

THE Convention (as above) met in Chicago, October 19-21. It was one of the most successful meetings of the association since it first began its existence. Rooms in the newly completed Art Institute building were engaged for the Convention. Twenty-three cities were represented, the members numbering about sixty. No representative from California appeared in the roll call.

Among the more important resolutions considered was the following:

"Resolved, That a committee of five members be appointed, of which the chairman of this Convention shall be an *ex-officio* member, the other members to be selected by him, to act jointly with one of a similar number to be appointed by the Western Association of Architects at their next annual meeting, to report as to the best and speediest methods of consolidating all the architectural societies of America into one organization, the report to be full regarding the form and constitution for local societies, and also regarding the form and constitution and permanent place of meeting for the national or representative body; that the Western Association of Architects be, and are hereby invited, to unite with us in this work, and to appoint a committee as above."

After considerable discussion, it was adopted. Another question of much importance to architects related to a uniform system of contracts. This was referred to a special committee.

Richard M. Hunt, of New York, was elected President; Henry J. Potter, of New York, Secretary; O. P. Hatfield, re-elected Treasurer.

One of the social features of the Convention was the omission of the usual official banquet, and in its place a series of "lunches" was inaugurated.

Owing to the illness of the President, Mr. Walter, the Convention was presided over by the Vice-President, Ed. H. Kendall. We print the address in full, giving thanks to the *Inland Architect*, of Chicago, for our ability so to do.

THE PRESIDENT'S ADDRESS.

"Having known for only two or three weeks that, owing to serious illness, our esteemed President, Mr. Walter, could not be with us to-day, I can do little more than call you to order, and formally endeavor to perform the duties of chairman.

"I shall ask you, however, to undertake the business of this, our Twenty-first Annual Convention, with that especial dignity of bearing and soberness of purpose which would seem to be called for upon the attainment of our corporate majority, and will remind you that we are called together, in this great and prosperous city, for the purpose of exchanging our annual greetings, of renewing our allegiance one to another, of giving evidence that we are competent to do the work required of us, of investigating the current developments in the science and art of our profession, and of increasing our usefulness to ourselves and to our clients in all possible ways.

"We shall listen to papers from representative men upon subjects of especial interest, and reports of important committees must be heard and acted upon.

"One of the greatest difficulties encountered by your Board of Trustees, now that our field is so much enlarged, is the frequent meagerness of information concerning candidates for membership, and, in order to reduce this difficulty to a minimum, must we not soon devise a better method than the present one of determining whether or not those who wish to join us are qualified by education, by business habits, and by personal characteristics so to influence public opinion that we may command the respect and confidence of the several communities in which we work?

"Whether the present method can be made sufficient by a keener sense of responsibility on the part of those who know the applicants for fellowship, or associateship, or whether we should create an office, in the nature of a traveling secretaryship, the duties of which would be to come in personal contact with all our members and would-be members, and by intercourse and



PERSPECTIVE VIEW OF WOODLAND SCHOOL-HOUSE.

pine, rough, \$35 per M; redwood, \$40; common brick, \$7 50, delivered at site; press brick, \$22.

Carpenters' wages, \$3.25; masons', \$3.75; stone-cutters', \$3.50; painters', \$3.00; plumbers', \$3.00 to \$4.00; hod carriers', \$2.00.

But limitation in time will at present prevent more, as engagement to be present at a debate by members of the profession, at 1 o'clock, to be followed by luncheon, and the necessity for early mailing, so that this may reach San Francisco in time for November issue, render it necessary to close for the present.

We have simply introduced Salt Lake and its interests, have not touched Denver, and have but named Chicago. The innumerable items of great interest remaining unnoticed, will provide subject matter for future correspondence.

NEW PUBLICATIONS.

"INTERIOR DECORATION."

By Arnold W. Brunner and Thomas Tryon, Architects.

The authors, in this new work, concede that the house is built to suit the tastes of the owner. The exterior features are all arranged in architectural array, so that the gables and chimneys make, with the walls and roofs, the harmonious composition which, until now, has existed on paper. Within, all is perfect. The halls, rooms, stairways, and cupboards are of ample size and properly located, so that every long-desired plan is at last realized.

But, alas! smooth-plastered walls, well-laid flooring, and white ceilings are not enough to constitute what we call a home. The house must be decorated. And it is with the broad purpose of illustrating how this can best be done, artistically, that the authors have placed before the people generally, the above-named book.

For sale at this office. Price, \$3.00.

"MANTELS AND SIDE WALLS."

By E. Prignot and other architects and designers.
32 large plates.

The designs represented are in the Cheminee, Louis XIII., and Louis XVI. styles. The engravings are very fine, and artistically represent the various fine details.

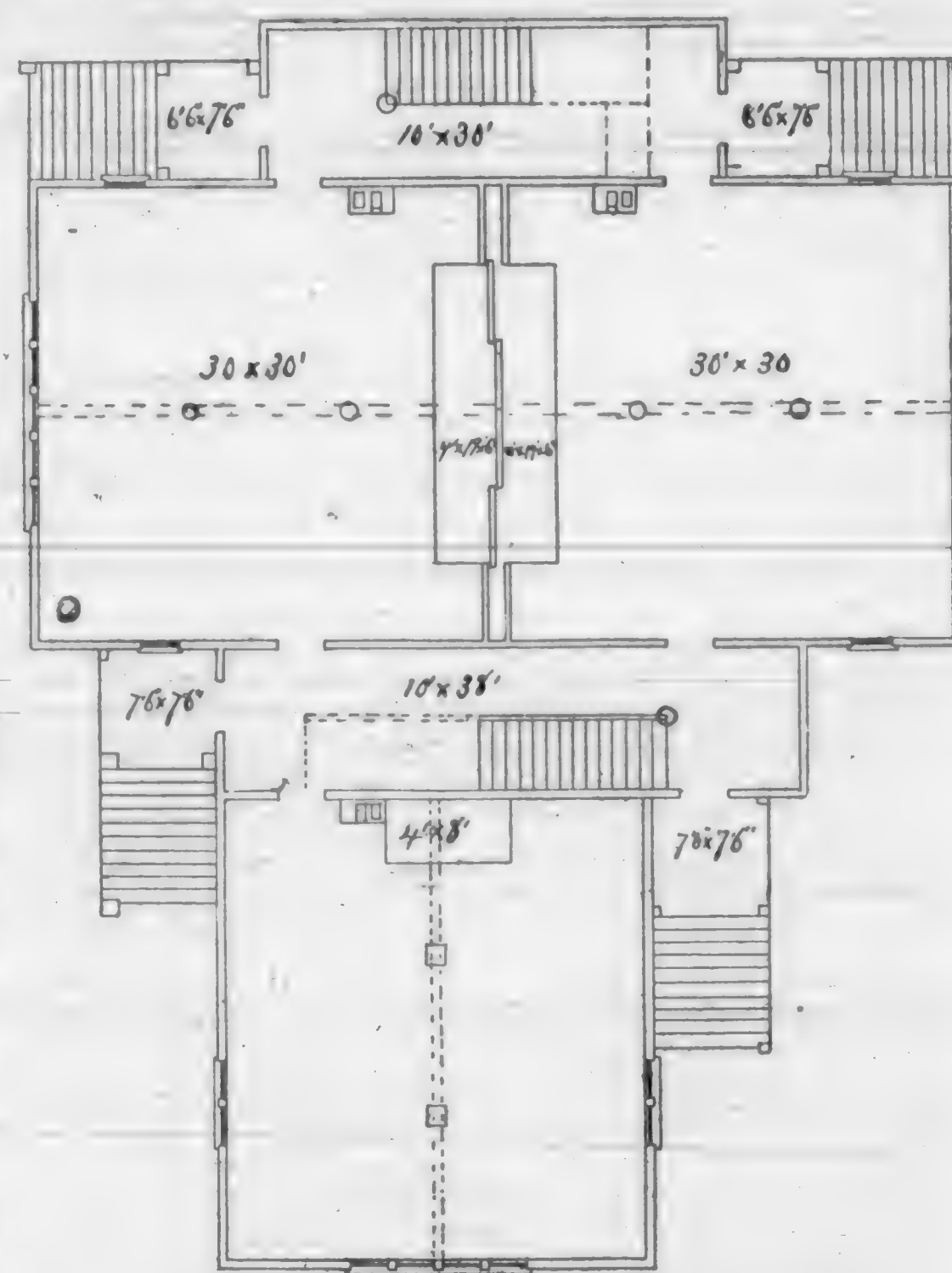
Price, in portfolio form, \$5.00. Send to this office.

"School House and Church Architecture".....	\$ 3 00
"Public Buildings".....	3 00
"Detail Cottage and Constructive Architecture".....	6 00
"Modern Architectural Designs and Details".....	10 00
"Monckton's Practical Carpenter and Joiner".....	5 00
"Mechanic's Geometry" (how to frame by card-board models).....	5 00

School-Houses.

AS people enter a town or city for the first time, they notice particularly the character of its public buildings. As architecture embraces to the elevation of national and individual character, and the increase of the physical comfort and well-being of mankind, it becomes the duty of the officers of every city to study carefully into every detail of the work of constructing buildings for public use. A celebrated German writer and thinker, F. Schlegel, has described architecture as "frozen music." If a building has for its primary object the education of the young in every branch, should we not pay some degree of attention to the building in which the minds of the youth are to be moulded? We have seen school-houses in the country where the wise and faithful teacher has been obliged to take the children and run around the room to keep warm, because of the wind blowing the cold air through the cracks in the siding upon the children, who were almost freezing. We hope that there are not many Boards of Directors in our State who allow their children to go to school in a building that is not as good as the barns they have for their animals. While this may seem to be an extreme case, yet there is large room for improvement, not only in our country districts, but in our cities. How many are to-day complaining of our school buildings because they may be illy contrived, poorly heated and ventilated.

In this issue of the ARCHITECT we give a cut of the Walnut Street public school building, in Woodland, which is one of the three now being used, and under the management of an efficient Board of Trustees. The building sets well up from the ground, the rooms are well arranged, high, light, and airy, and the ventilation good. This is one of the buildings that has been specially arranged for the comfort and convenience of all who labor and study therein. Messrs. Gilbert & Sons are the architects, and superintended the work of building, in which they have succeeded in combining utility and beauty of architecture. Architecture bears a strict analogy to language. Both are an expression of thought, and in the one, and in the other, the richness, variety, and precision of the expression will be in proportion to the quantity of the thought to be expressed.

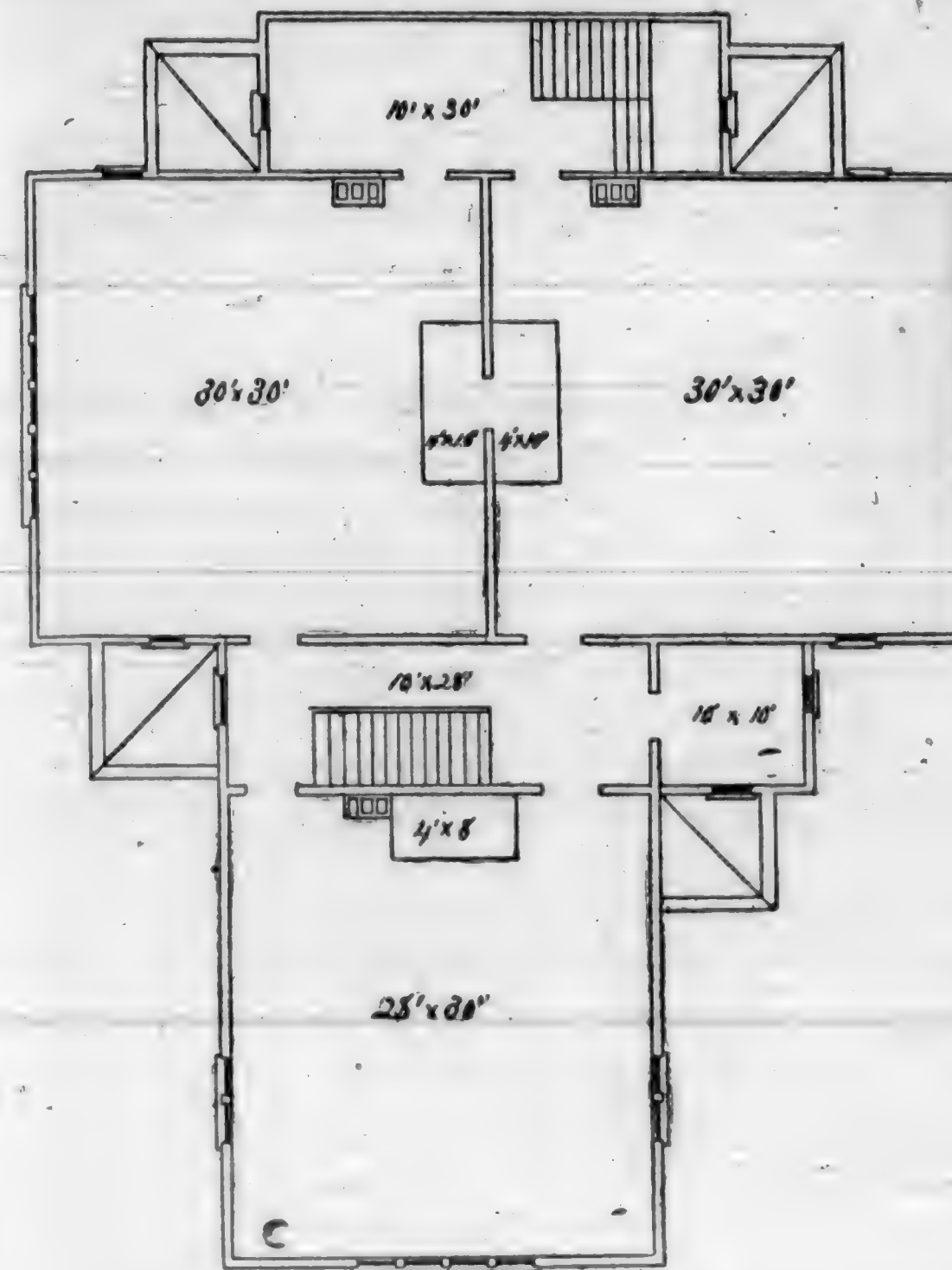


FIRST FLOOR PLAN WOODLAND SCHOOL.

Mechanics' Liens.

AN INTERESTING DECISION BY JUDGE LEVY.

SOME time ago Elizabeth Doherty had a building erected. A number of liens were filed against the same. These were all assigned to one C. A. Barker. The owner set up the claim that the action of those holding the liens assigning



SECOND FLOOR PLAN WOODLAND SCHOOL.

them to a third party, was illegal. In rendering a decision fully sustaining the plaintiffs, Judge Levy remarked: "It would require express words to prevent the assignment of a claim and the incidental lien. If every case in action is assignable, then a claim of a mechanic is one of them, and the assignment of the claim transfers the lien. In the cases at bar the liens themselves are transferred. It would be a gross injustice to the mechanic if he could not transfer his demand against an unwilling creditor, and thus perhaps be provided with the only means of a speedy return for his labor. To deprive the mechanic of this privilege to realize at an early date on his work, without the sanction of clear language in the statute, so clear that he who runs may read, would be to apply a rule of construction unworthy of the liberal spirit of our mechanics' lien law. Certainly, the bare right to sell his demand, without at the same time assigning his lien, would be holding the word of promise to the ear, and breaking it to the hope of the mechanic or laborer."

How Are Paints Analyzed?

IT is often a matter of prime importance to ascertain the constituents of a paint. The majority of master house painters, indeed, never trouble themselves with getting an analysis of a pigment. Should a paint prove unsatisfactory, they merely change the brand, and usually continue uninformed, however they may suspect adulteration, of the cause of disappointment in its working. Analysis, after all, is a somewhat expensive affair, and necessitates the labor of an expert. To manufacturers and large dealers, more particularly to the latter, the employment of chemical tests from time to time is a necessity. Danger, though not of a dynamic order, may lurk in the raw material supplied to them commercially as pure; or an article in itself unadulterated may contain for the purpose wanted a disproportionate amount of a given constituent, rendering it unserviceable, or at least objectionable. There are clerks who closely watch over the interests of their customers, in becoming thoroughly acquainted with the qualities of what they sell, which is done partly by ascertaining the constituents, and again watching the effects of subsequent combinations where two or more pigments are mixed together for certain hues; further, by ascertaining from practical painters how they work. It will doubtless be of interest to our readers to learn something of the processes of resolving an article into its constituents.

At the New York Convention it was suggested that possibly it might be desirable for the body of master house painters and decorators to appoint officially a chemist to whom members might send samples of paint for examination, but the subject was not formally discussed. It is easy to perceive the advantages that would arise from such an arrangement on the part of State organization, which would encourage members to have samples made at the moderate price at which these could be obtained. Many occasions arise on which the purchaser wishes to discover exactly what he has got; and even the labeling of goods for what they are, even if enforced by law, would not wholly dispense with such occasions. There is abundant evidence to show that even laws which carry penalties, if violated, cannot make all manufacturers and dealers honest.

Among other objects of analysis is the discovering of the amount of coloring principle. For instance, a sample of plumbago should moisture 0.26 per cent; ash, 8.5; carbon, 91.19. Some of these coloring principles contain great colorific intensity, and will stand an admixture of white pulverulent substances, such as barytes and whiting, without assuming a gray appearance.

The sample to be analyzed may be in the dry state, ground in oil or in liquid form, ready for use. In the latter case, the fatty or resinous portions of the paint are extracted with benzine, alcohol, and ether, which leave the pigment in a form of powder suitable for analysis. In some cases the additions may be removed by simple ignition; however, as reductions are very apt to take place, that is to say, some of the elemental constituents of pigments thus destroyed, this process is followed only in a limited number of cases.

In analyzing dry colors, or those freed from oil by extraction, the main difficulty consists in the separation of the different lead salts, as, for instance, plumbic sulphate and carbonate from each other, and from baric sulphate and silicate (clay) a solution is first applied to separate the two. Sodic hydrosulphate proves an excellent solvent for the plumbic sulphate. In fact, all analysis is based on chemical reactions. It will surprise most persons that the most complicated process of analysis occurs with chrome green, blue, and yellow. It is so elaborate that space prevents an account of it. Then there are chemical tests to be applied to the various substances precipitated, or otherwise separated from their compounds. As a confirmation for the correctness of the result, the several residues of extraction are weighed, sometimes after being again dissolved and reprecipitated.

To ascertain the relative "strength" of two colors of similar shade, the following experiment is made: Half to one gram of each sample is mixed with five to ten times its weight of a pulverulent substance, which exerts no chemical action on the pigments, as, for instance, baric sulphate. After sufficient mixing, the shades are compared, and the darker one made equal to the light one by further addition of baric sulphate. On re-weighing the samples their weights will give the ratio of their relative "strength."

In the case of so-called liquid or ready-mixed paints, the vehicle, as well as the suspended coloring matter, is an object of analysis. The vehicle for paint is combined with the aim of obtaining approximately the same specific gravity as that of the pigments, so as to keep the latter suspended (most of them "settled," however, nevertheless). Among the most commonly occurring constituents of the vehicle may be mentioned benzine, oil of turpentine, resins, linseed oil, etc. Soap, water, glue, small quantities of soda, borax, or alum, besides all kinds of low-grade oils, are frequently met with. The nature of a vehicle may be approximately determined by fractional distillation.—*Painters' Magazine.*

Apt Names for Bad Workmen.

STRIKES bring out the technical slang of the trades, and particularly the opprobrious epithets with which the different classes of workmen distinguish the unskilled operatives who labor at the same trades. In most cases it will be found that these slang terms originate in some technicality of the trade. Thus the telegraphers call a poor operator a "plug," after the little metal implement which divides the switches on the key-board, inasmuch as the plug or "key" is a comparatively unimportant part of the machinery. Printers designate an unskilled type-setter a "shoemaker" or a "blacksmith." The derivation of the former appellation is from the fact that a compositor who makes errors is obliged to correct them after the type is set up by taking out the misplaced letters and "pegging" the proper ones into



THE RUBIDOUX—SOUTHERN CALIFORNIA ARCHITECTURE.

their places. Tailors also use the word "shoemaker" to distinguish a poor hand, as an unskilled workman makes his stitches too far apart, and is therefore better adapted to sew leather, where he can punch the holes with an awl before putting the needle through. The appellation "blacksmith" is applied to a printer whose fingers are clumsy, and a jeweler also terms an unskilled worker at his trade a "blacksmith" for the same reason.

A term of opprobrium which was used by old New York printers to designate an unskilled compositor was the word "boarder," from the fact that a poor hand was generally a drinking man and spent his time loafing or "boarding" in liquor saloons. All striking trades-workers in common use the general word "scab" to distinguish workmen who take the place of strikers. The derivation is obviously from the fact that the scab is a morbid growth, and lives only at the expense of the well-being of the rest of the body. Shakespeare uses the word scab as a word of opprobrium, and Webster defines scab as "a mean, dirty, paltry fellow," which may have suggested the original application of the word to its present use. The printers and telegraphers, two of the most intelligent classes of workmen, are the only tradesmen who have invented names to particularize the scabs of their respective professions. Thus, compositors call a scab a "rat," in contemptuous allusion to the rodents who infest printing offices. The telegraphers have only recently invented a term for scab operators. They call them "contumists," though the application is not of technical derivation, but is probably an attempt to manufacture a word from the Latin *contuma*, the root of contumacious, to describe a stubborn and obstinate person.

The various names actors give to the unskilled members of their profession are familiar to most of the reading world. A poor actor is termed variously a "stick," "fakir," "statue," or "dummy." A "stick" or "statue" is, naturally enough, an actor who is awkward and stiff on the stage. The term "dummy" is derived from the fact that when a traveling company has not enough members in the company to fill up a large stage, men and women are employed to stand in the back with choruses or supernumeraries, and take no other part. They are called "dummies." "Fakir" is a generic term, and comprises those actors who lack talent and depend upon other resources. For instance, a comedian who makes faces is called a "nugger," and a tragedian who bellows is a "ranter," and both are "fakirs." The professors of the manly art are also apt in this style of nomenclature. They call a cowardly fighter a "duffer," and a weak, unskilled boxer, a "sand bag" or "stuff," the latter terms being derived from the contrivance upon which the pugilist does his practice.—*Carpentry and Building.*

THE rapid increase of hotel building in the southern part of California, is a fact that is noted by most all metropolitan journals throughout the Eastern States. With the exception of the new hotel on Coronado Beach, opposite San Diego, probably no one has caused more comment than that represented above. The length of the building is 341 feet; length of the north side, 282 feet, and the south side, 199 feet, while the total area of the main floor comprises 19,473 square feet. The exterior will present a combination of the English, Gothic, and Swiss styles of architecture, and with a touch now and then of Old Holland timber work, presents a very beautiful and uniform appearance. The dining-room is 50x100 feet in size; ladies' parlor, 40x65; kitchen, 65x70. Billiard room is circular in form, having a diameter of 40 feet. Ball-room is 40x100, with ceiling 20 feet in height. A children's play-room is provided, same size and character as billiard-room. From the above measurements one can somewhat judge of the great size of the building. There are 250 guests' rooms. The hotel is thoroughly supplied with all the modern conveniences, and when in running order, no doubt will be one of the leading hotels in California. J. C. Pelton is the architect.

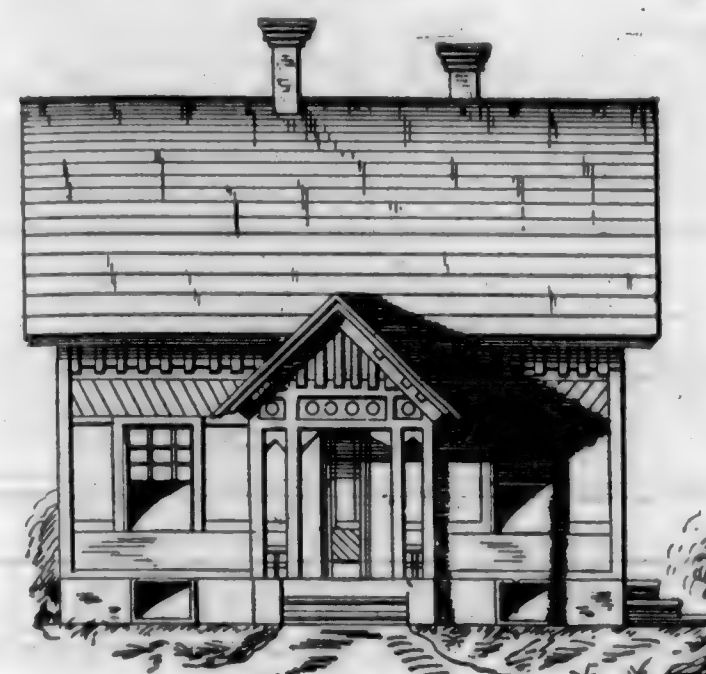
Safety Dumb Waiter Fixtures.

THE New York Safety Dumb Waiter Fixtures are the most complete, simple, and absolutely safe waiter made. They move with perfect ease, and are perfectly noiseless in their operation. They are provided with a safety rope, thus avoiding the chances of an accident. These fixtures are handsomely bronzed, and packed one set in a box. They can be adjusted by any carpenter or mechanic. Full directions accompany each box. Dunham, Carrigan & Co. have been appointed as agents for this city, and they will keep a full stock on hand. Manufactured by the Edward Storm Spring Co., of Poughkeepsie, New York.

Constitutionality of the Plumbing Act.

A PLUMBER, by the name of Chas. Friermuth, was lately arrested and convicted for a violation of the provisions of the Plumbing Act, passed March 3, 1885. The defense set up the plea that the Act was unconstitutional. In order to test the matter, after being found guilty, Mr. Friermuth quietly went to his free accommodations, but was immediately released on a writ of *habeas corpus*. Judge Wallace decided the Act constitutional, which leaves the matter open for Mr. Friermuth to take an appeal to the Supreme Court.

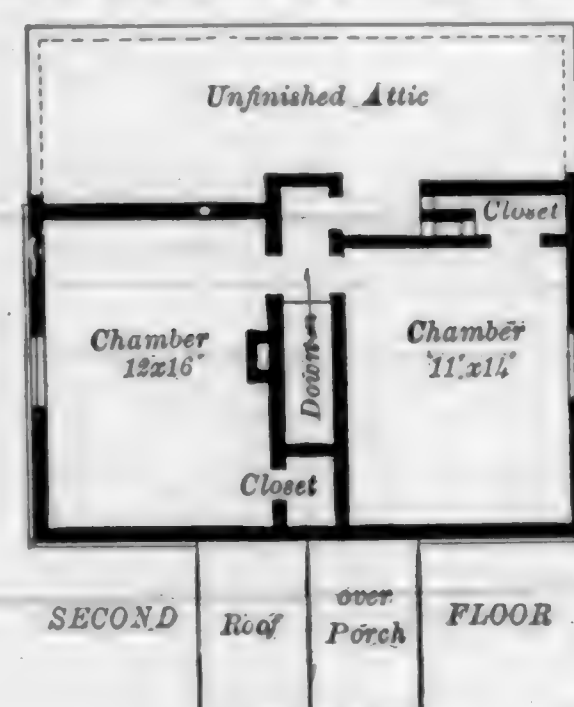
A Wage-Worker's Comfortable Home.



FRONT ELEVATION

IN the accompanying plans and elevations of a small but comfortable home, we had, primarily, in view the expenditure of but a small sum of money, and, in view of this fact, the rooms have been kept to a size convenient for the purposes marked on each. The outside finish, also, while presenting an attractive appearance, has but few, if any, embellishments that can be dispensed with. The addition of the front porch adds much to the beauty and utility of the design, and yet the expense of the same is but trifling. We present a few suggestions to those who are interested in the plans given.

A well-lighted and ventilated basement is always to be desired in a country home, as it prevents the articles kept therein from being affected by either heat or cold. (We are now writing in California, where very cold weather is never experienced.) A farmer or mechanic can construct his own



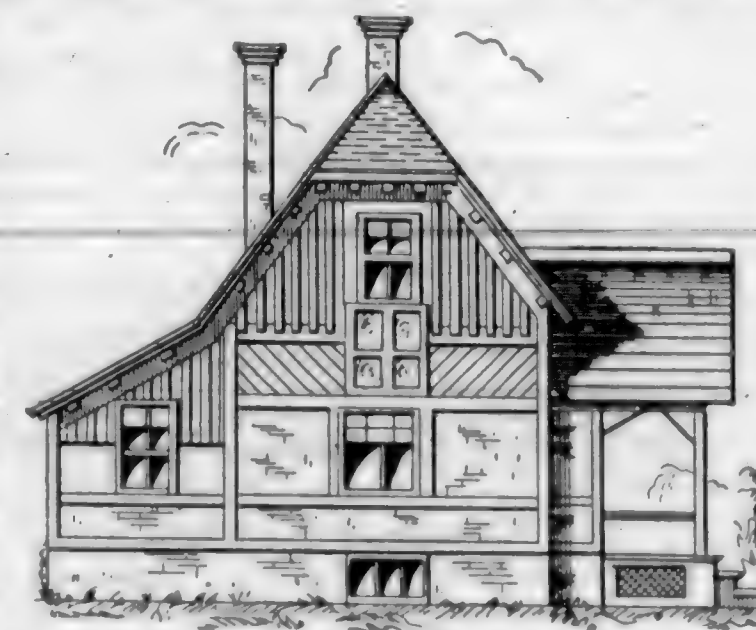
basement at but little expense. There are but few places where rock cannot be conveniently had. During the spare time, haul enough of this material to the building site. With the aid of one mason, you will soon have a basement that will bid defiance to the storms. Calculations can be made so that the dirt excavated can be placed on the four sides of the house, sloping gradually from the walls outwards, so as to insure proper drainage. If the cellar is to be used at times as a work-shop, it would be well to place more windows on the side for light; but those shown will be found sufficient for all ordinary purposes.

The walls of basement being finished, see that the wall plate is well bedded, and as near level as possible. This is important, as it saves much time hereafter. After the joists are placed in position, fill up the spaces between them with rock, so that rats and mice will not be able to get a foothold. This is also an important fact. Cut your flooring, and turn it upside down. Do not nail it until house is all inclosed. By this means

the workmen have a substantial place to work on, and, better still, the lumber has a splendid chance to thoroughly dry and shrink. Do not rest your plates on the joist. Nail thoroughly a piece of flooring first on top of the joist, and let your plates rest on that. This prevents the unpleasantness, common to so many houses, of a draft from under the base-board. These suggestions may look simple, but they serve, if carried out, to make a home truly comfortable to live in.

Do not spare the braces; they cost but little. Have them well nailed. Then when the storms come, as you sit in your dainty parlor, what a pleasant sense of satisfaction you have to feel that no storm can shake your little abode, for it is well nailed together, well braced, and founded upon a rock.

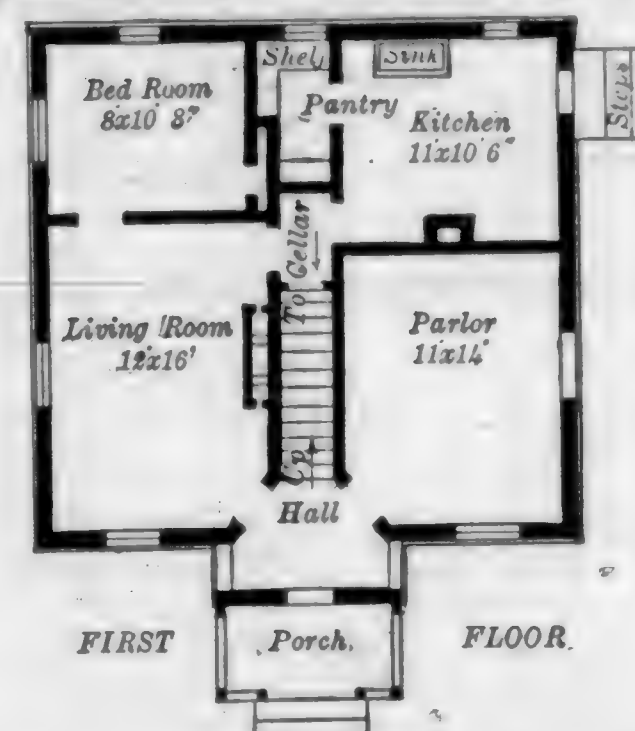
Two more essentials of the building must receive careful attention. See that your chimneys are well built. Do not let a single joint pass your observation. Have the in-



SIDE ELEVATION

side well and smoothly plastered. Take no chances on, "That will do." It will not do to have your house catch fire from a defective flue simply because you wanted to save an hour's time and a bucket of mortar. Notice carefully the shingling of your roof. Do not let the workman fool you by saying one nail in two shingles is good enough; that is all nonsense. Shingles must be well nailed, as much so as the flooring. Look out for the flashing around the chimney. No leak is wanted there, and a little care will effectually prevent the same.

The plans are very legibly marked as to the size and character of the rooms. Any mechanic can erect the house shown by the designs given. We hesitate to give the cost of the house. Lumber in this city has increased from \$15, a little over a year ago, to \$25 at present time. Wages are higher. All necessary materials are higher. But for a general average, we may say that the build-



ing will cost anywhere from \$1,200 to \$1,600, depending altogether on the location.

The unfinished attic will be found a convenient receptacle for the storage of trunks, etc. By increasing the height of the stories

a little, this part can be utilized for sleeping-room in case of necessity.

Mutual Destruction.

IT is a fact, but nevertheless one that has escaped the attention of many, that many substances and materials used in building are mutually destructive. Certain kinds of wood which, taken individually and separately, possess remarkable lasting and wearing properties, placed in positions of mutual contact rapidly deteriorate, and, may be, soon disintegrate and decay. In a firm fence two woods, cypress and walnut, each a timber justly celebrated for long wear and immunity from the destructive atmospheric influences, when placed together rotted very rapidly. The same was true with reference to cedar posts and cypress leaders and palings. At the point of contact decay set in at an early day and progressed very rapidly; and to prove that actual contact was the ultimate cause, the two were separated in a number of instances, in every one of which rotting ceased, and the wood remains perfectly sound save where they were in contact formerly.

With the growing scarcity of many valuable building woods, it becomes necessary to back and fill with varieties not formerly used. As a result there are many structures already tottering with decay that should have remained perfect and erect for many years yet, and that, too, when the timber is in out-of-the-way and isolated positions favorable to long life and usefulness.

Though the world of science is yet too young and weak to reconcile the two branches, architecture and chemistry, the time will come when the scarcity of building material in general, wood in particular, will necessitate chemical as well as architectural analyses before it will be deemed safe and expedient to place two untested woods, or other substances, together. All have seen the effects on timber exposed to gases emanating under certain processes of manufacture, and many have marveled at the permanency of some and fragility of others, when, as is often the case, conditions and surroundings being changed, the property of wood often changes correspondingly.

It is safe to state that no two varieties of wood possess the same essential chemical characteristics, and the instant one possessing much alkali is placed near another that may acid in its reaction, it will invite rapid dissolution and decay. What is true with reference to wood applies with all the force to other materials used in structures. Two uprights, the main-stay of a quite large country bridge, rotted off at the ends when bolted together with an iron bolt. New ones were placed in and fastened by wooden pins of the same variety, and ten years have elapsed, and still they stand. In the first instance beech, which is known to contain much acetate, was used, and the iron soon oxidized, transmitting the rot to the wood, and though the rest was perfectly sound, about the splice soon rotted off, while in the latter case the same wood, I believe from the same tree, was used, but the wooden pins did not rust, and the joint remains firm and sound at this writing, and it is now nearly ten years since the renewal was made. Now, if a wood like ash or oak, having less acetate in its composition, had been used, instead of rotting and oxidizing it would have tended to preserve the iron, hence would last longer than if fastened with pins made of its own species of wood, or any other, for that matter. —J. Frederick Elsom, in *Inland Architect*.

San Francisco's Wooden Houses.

THE captious and transient critic rarely visits us without having his fling at our wooden houses. A city of shanties, a wilderness of redwood, a big lumber yard and a collection of shells, are some of the expressions which he throws at our devoted heads and into the pages of his correspondence. He contrasts San Francisco with the brick-and-mortar cities of the East, much to the discredit of the former city; he compares the flimsy character of our architectural materials with the brown-stone veneers of New York and the solid limestone walls of St. Louis, and he charges us with living in a flimsy place and in houses that must impress their owners' minds with feelings of instability and change.

Our critic has much reason in what he says, but at the same time there is a good deal to be urged in extenuation. The main point in the answer is that with us it has been very largely a question of supply and demand of material. The first missionaries have left their architectural imprint in the crumbling ruins of adobe walls. They built of adobe because the clay was at hand, the sun was nearly always shining warmly enough to bake their bricks and the work of kneading and cutting was an easy one that the Indians could learn in an hour. That was one reason; and another was that the padres were rabid on the subject of arboricide. They believed and carried out the belief that the man was blessed who made one blade of grass to grow where none had grown before, and instead of cutting down trees they planted them. To destroy a tree was a crime against nature, and they gave much loving care to the culture of "shade-making trees." The oliviers of the San Diego Mission, the lovely avenue along the Alameda of Santa Clara, the vines of the Mission San Jose and the gardens of Santa Barbara all prove how deep was the love of the padres for leaves and blossoms and how they strove to add to the scant beauty of their surroundings. When the use of timber was imperative, as, for instance, in the rafting of a church, they only used a few massive logs and scarcely squared them at that. Every other part of the building was made of clay. The roofs were covered with clay shaped into convoluted tiles and burned a deep red; the walls, as we have seen, were built of clay blocks burned in the sun, and the floors were lined with flat tiles made of a finer clay and brought from Spain.

Then came the early mining era, when men lived in tents, or in lean-tos of branches and calico. But the summer breeze blew the calico into rags and the winter's rains poured through the rents, and some other shelter was absolutely necessary. Of what material that shelter was to be built was a very serious question. The adobe was thought of, but the hunting for clay beds and the tedious waiting for the bricks to dry when once they had been made was a work and waiting not at all suited to the hurry-scurry miner. Of stone there was very little, and its use meant quarrying, and our argonauts decided that they would have all the pick-and-shovel work they wanted in the mines. There remained, then, lumber, and the first "house" that was built in San Francisco was of rough sawed lumber. The planks were brought up in a schooner from Monterey, where a mill had been established, and soon other mills were started and the lumber-carrying trade became one of sufficient importance to keep a small fleet of coasting schooners busily employed. That was an era of experiments. Some men pressed the Mission people into service and built an adobe hotel on the southwest corner of Clay and Kearny in 1847, but he had no imitators. Then some enterprising spirit brought out a ship load of bricks from the East, in the fifties, but they were worth almost as much as though they had been made of bullion. Granite was brought from China, sheet-iron from France and more bricks from Philadelphia; but all were found too expensive or too troublesome to work in those easy-going days, and the handy plank, upright and a nail or two grew steadily in public favor.

So the building of wooden houses was due to a question of material and the expense of securing it, and so it has largely been ever since. We have grown accustomed to our houses of planks, and, being accustomed to it, we are led to discover excuses for its short comings and to find good points where strangers can only see faults. It will be curious to look into some of these claims for the next minute or two.

We are in the habit of saying, for instance, that our frame houses are warmer than those made of brick, for San Francisco is not entirely without residences built in the Philadelphia fashion. This proposition, we think, is scarcely tenable. It may be true

that the sun will heat a box more quickly than it will a pile of bricks, but it is equally true that the pile of bricks will retain that warmth long after the box has grown cold. Stone retains the warmth still longer than brick, and this is susceptible of very easy proof. Let the reader walk for an evening beside a brick wall, a stone wall, and a wooden fence that have been all day long in the eye of the sun, and he will find that the stone wall gives out a heat that is perfectly perceptible at two feet of distance, that the bricks are warm to the touch and that the fence is cold. Then, too, if the wooden wall, allows the warmth to penetrate easily it must also allow of easy entrance to the cold and the wind. About this latter proposition there can be no doubt, and the proof is to be found in every wooden house parlor in San Francisco. Let the southwest wind blow up smartly in January or February, and every room in the house with that exposure is so cold and damp that fire is needed all day long. The fact of the matter is that the old brick houses were built with too much wall and too little window. We want all the sun we can get, and in the wooden houses, there being less support wanted, there is generally as much window-glass space as of plank.

It has been said, too, that the wooden houses of San Francisco are its salvation from extensive fires, because the redwood lumber does not burn easily, because it scorches rather than blazes. There may be something in this, but we would much rather believe that our immunity from large conflagrations is more owing to the efficiency of the fire department than to the incombustibility of redwood. When once a big fire has got full headway we are afraid that the wonderful sequoia will not check its progress.

The wooden house has done good service, but unless we are very much mistaken it has seen the prime of its days. It has enabled us to build up a great city quickly and cheaply; it has resulted in a pleasing if not very classic form of architecture, but we do not depend upon it as exclusively as we did. The brick fields of the State are spreading, the quarries are being opened, good building-stone is found in every county in quantities sufficient to build a metropolis, and lumber is becoming yearly more expensive.

Besides this, the necessity and inclination to build hurriedly are both past. We no longer look upon ourselves as fitting sojourners, we know that we shall spend our years in this same city of San Francisco; we want to erect substantial monuments to the spirit of domesticity; we are running to the brown stone blocks and cyclopean walls; we are "going in" for solidity; we have new ideas of style, and we believe that the time is not far distant when the man who spends his money in a redwood mansion will be looked upon as being behind his times.

FOR ELEVATORS.

Automatic shutters or doors that completely close the well openings at each floor of a building. A California invention.

Probably no one subject has been more generally studied by inventors than elevators and the safety appliances connected therewith. Hundreds of patents have been obtained for the purpose of guarding those who are obliged to go up and down to the various stories of our large buildings, from receiving injury, should any portion of the machinery break. The large fires that have occurred in this city in brick buildings, turned the attention of many of our deep thinkers to providing a simple remedy against the spread of fire through a building, by means of the elevator shaft. Device after device was experimented with. Difficulties beset the inventor's path, until the object sought to be obtained seemed farther away than when the thoughts first run in the direction referred to.

Mr. A. G. Page studied and experimented after the Bancroft fire in this city, to overcome the various defects noted by fire marshals and the insurance men generally; and in the PAGE AUTOMATIC FIRE SHUTTER we have the successful result of his inventive genius. The device is a very simple one. Two wooden shutters or doors are thoroughly covered with sheet iron. These are hung on a level with the floor, and fit closely the opening through which the elevator passes. A set of doors are placed at the level of each floor, be there two or six stories. As the elevator rises, the doors below the floor of the cage close automatically, while at the same time the doors of the floor above open. The same operation is repeated at each floor ascending or descending.

One of the chief merits of this device is that the doors, after the elevator has passed, can be used the same as the floor. Hand trucks loaded with goods can be freely rolled across the doors. They are securely held in position by an ingenious automatic lock, and cannot be moved except by the running of the elevator. On the main floor, especially, this will be found of great benefit, for, after the elevator has passed upwards, truck loads of goods can be moved across the elevator way, on a level with the floor, without any obstruction.

Again, this invention, in case of a fire, will prevent the usual fiery draft up the elevator shaft. At each floor the cut-off is perfect. The firemen instinctively feel there are no dangerous openings for them to fall into, and thus they will have more energy to penetrate into all parts of the building.

All the different parts of the simple machinery are in plain view. In going up or coming down, the whole action is before you, and you wonder at its extreme simplicity. It does not matter about the height of story or size of the opening. These shutters can be fitted to suit the various conditions connected with any description of building. Their cost can be saved in mercantile buildings in one year, from the time gained in using the different floors at all times, save when the elevator cage is stopping at any particular floor.

This device is no experiment. The large mercantile house of Cunningham, Curtis & Welch has the elevator fitted with this device. The San Francisco Tool Co. have two in successful operation. The chief engineer of the Fire Department, the fire marshal, the fire patrol, the city architect, many of our leading architects, and agents of the principal insurance companies and "Insurance Union" have given their approval of the invention. We shall call attention from time to time to the various buildings in which it is to be introduced. The device is clearly illustrated in the advertisement in this issue, and the company are prepared to execute all orders for shutters in new buildings or in those already constructed to insure safety from fire or accident.

Elevation of School Building at Lodi.

LODI is the largest town in northern San Joaquin Valley. It contains many nice buildings, but none receive the notice that is bestowed upon the public-school building. All the citizens look upon it with pride, and strangers entering the beautiful farming town are soon made to feel that more than ordinary attention is given to bestowing a liberal education upon the young of the section in which is built the fine school-house, a faithful representation of which is portrayed above.

Japanese Carpentry.

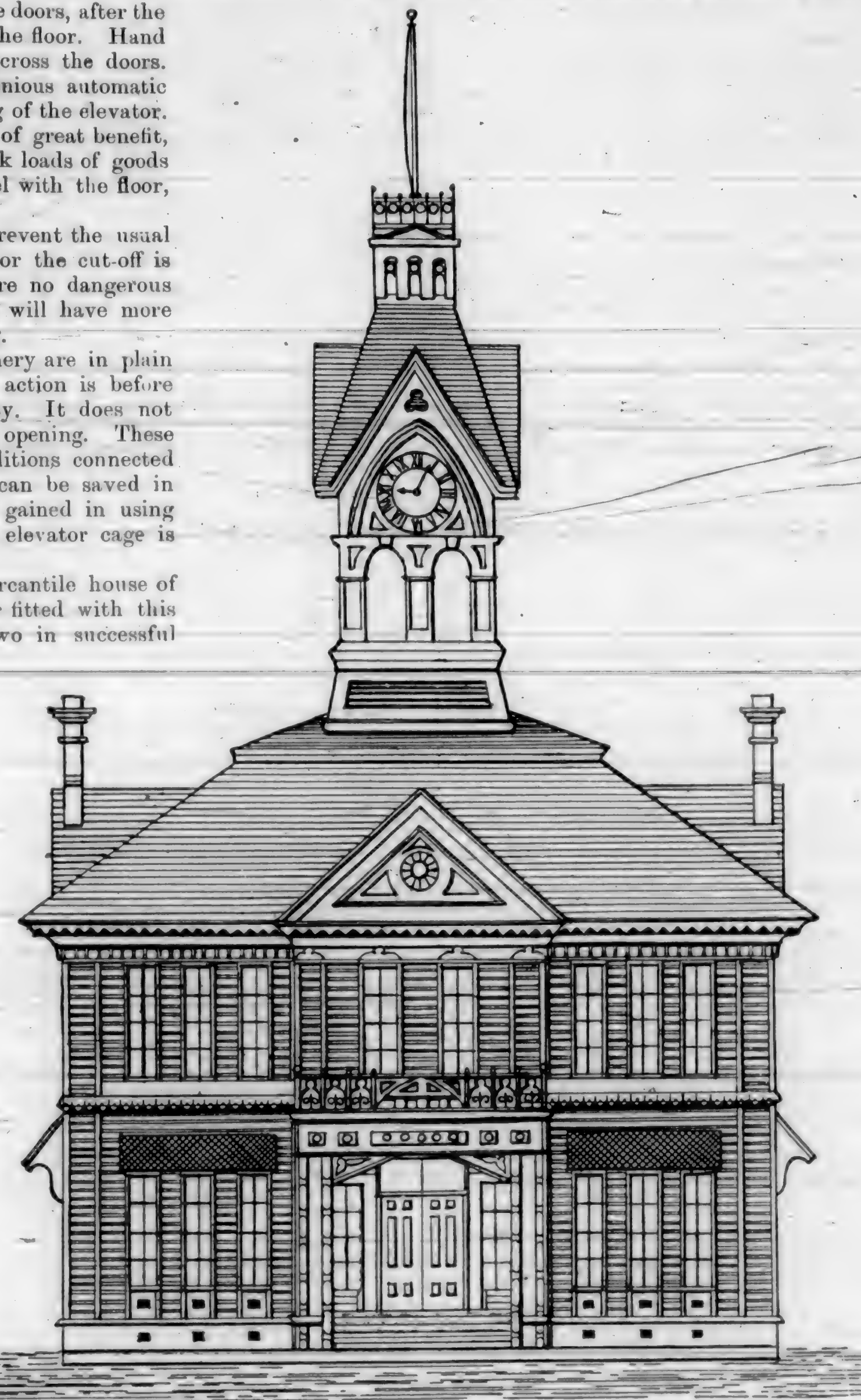
K. BURTON, in the *British Journal of Photography*, gives the following interesting account of how Japanese carpenters work:—

"The work-shop is a room perhaps twenty feet square, the floor all covered with straw mats. We are accommodated with chairs. This is an unexpected and certainly a pleasant advantage. We had looked to sitting on the floor, and accommodating our lower limbs as best we could.

"And now to give some idea of the manner of working, if possible. There are four carpenters in the shop. Each squats on the floor with his bench—or what takes the place of the bench—and his smoking gear beside him. The bench is nothing more than a flat board of hard wood, the dimensions some three or four feet long, about eighteen inches wide, and an inch thick. It lies directly on the straw mats. The smoking gear consists of a stone-ware bowl, which is filled with wood ash, in the center of which a few embers of charcoal are kept always alight. The bowl stands in a square box, in one corner of which also stands a short piece of bamboo, into which is knocked the

tobacco ash after smoking. The pipe has a wooden stem and a metal mouth-piece and bowl, the latter very diminutive. A pinch of tobacco is put into the bowl, the bowl is thrust among the live embers, a single puff, or at most two, are taken, the ash is knocked out of the pipe into the bamboo pot, and the smoke is over. The tobacco is the very mildest, and is cut exceedingly fine. I think no Japanese workman is ever without this smoking gear. In his work he pauses every few minutes, takes his smoke, as I have described, very deliberately, then returns to his occupation. The smoke is by no means unpleasant, but would certainly be too mild to satisfy certain photographers at home that I could mention.

"The bench has no arrangement whatever for fixing the work. It is merely the board of wood that I have described, without any addition whatever. That work should be turned out, on such a bench, of a quality to rival all but the finest camera work at home, is a thing I certainly should not have believed unless I had seen it. One thing which enables a Japanese carpenter to get on without any arrangement for fixing his work is that he uses his feet as well as his hands.



ELEVATION OF PUBLIC SCHOOL BUILDING, LODI, CAL.

"It is doubtless mostly due to practice, but also in great measure to the foot gear used by the Japanese, that they can use their toes to grip in a manner which Europeans could not imitate at all. The foot gear consists either of straw sandals or wooden clogs, the latter generally mere thick slabs of hard wood, which are held on the feet each by a thick cord, which passes up between the big toe and the one next to it, bifurcates just over the toes, and joins the sandal or clog again at each side of the heel. The foot is thus never cramped or distorted, as with us, and the toes can be freely used. A Japanese tailor holds his cloth with his toes, and a carpenter holds and turns about his wood with his feet. I was about to say that he manipulated it, but this, I presume, would not be allowable.

"The tools are much more simple than ours. The hammer is merely a cylindrical mass of iron, with a transverse round hole through which the handle passes. The saw is merely a strip of steel with serrated edge, and with a "tang" whereby it is fixed into a round handle like a chisel handle, much as we fix a file at home. The work is done by the upward or drawing stroke.

"The plane is in general form somewhat like ours, but the wooden portion is much thinner, shallower from top to bottom, and the knife is inserted much nearer one end than with us. It is unlike our planes in that there is no second adjustable iron, and that there is no wedge for fixing the iron. The iron is just in the form of a chisel, and is held in position by friction against the sides. With the plane, as with the saw, the work is done by pulling or drawing, not by pushing. The knife is fixed near the end, which goes in advance as the plane is drawn along. One would suppose that with such a primitive tool only rough work could be done, but the very reverse is the case. I have seen a Japanese carpenter do what anyone who has ever practiced carpentry will know is by no means an easy thing. I have seen him take out of the middle of a board of hard wood a thin, delicate shaving several feet long, and the whole width of the plane-iron. One reason, perhaps, why such good work is done with the Japanese plane is that unless the edge of the knife is kept in very good condition, the tool will not work at all. It is, therefore, kept as sharp as a razor, a deal of time being consumed in the very frequent setting of it.

"One result of the simple construction of the Japanese plane is that a carpenter thinks nothing of making a special plane for any piece of moulding or such like work that he may have to do. These are sometimes very minute. I have seen them only about an inch and a half long and three-eighths of an inch wide. It thus comes that much of the work done by us with gouges, chisels, etc., is done by the Japanese with the plane. None of the other tools that I noticed differed greatly from those used at home, except in being rougher and less finished in appearance.

"The work that was being done was merely the exact copying of an English camera and dark slides. At work of this kind the Japanese are very clever, but they appear to have but little capacity for original mechanical contrivance. They, moreover, have very little idea of saving labor by machinery, or of division of labor. The consequences are that, although they turn out work of the kind that I have been describing, cheaply—the camera was to cost about one-half what it would cost at home—they would turn it out no more cheaply if goods were manufactured on a large scale. If a thousand dark slides were to be made, each one would be made precisely as the first, one workman doing the whole of the work. It is probably due to this very fact, to the fact that the Japanese use little or no machinery, and that, as a rule, an article is made from beginning to end by one individual, that we owe the indefinable artistic charm which there is in the commonest product of Japanese labor. It is because each article has something of the individuality of the worker in it.

"The camera maker thought it his duty to keep us entertained as we watched the progress of the work, and brought up to us, one at a time, what he considered the greatest treasures of his store. He brought first a fine and very large musical box. It was of French make, but set to play Japanese airs, or music, rather, for I have failed as yet to find any approach to air or melody in the Japanese singing or playing. He next produced a Hall type writer, afterward various other mechanical toys for our amusement. The bellows of the camera was being pressed in the selling shop by the simple expedient of piling lithographic stones on the top of it to a height of some four or five feet."

Remaining number of this year given free to all new subscribers for 1888.

HILL'S Patent Inside Sliding Window Blinds,

Are Adapted to any Style of Window,

And Suitable for all Buildings, Dwellings, Stores, Office Buildings, and for Houses Built to Rent, Hotels, Boarding or Lodging Houses are Unexcelled.

They are entirely inside of the window casing, and while requiring no furring out or boxing, make it an impossibility to tear curtains, interfere with plants or window ornaments, or become broken by contact with chairs or other movable articles.

The light can be admitted and sunlight excluded from any part of the window; can be instantly removed and taken to any part of the house to clean and as easily replaced.

They can be opened or closed with the window raised, and without removing articles from the window-sill, and cannot blow open or rattle. The Blind is very light (one-half inch in thickness) and strong, possessing more durable qualities than a hinged blind one inch in thickness.

There is no sagging, banging, or getting out of order.

They are made in three sections in height (each section sliding past the others), and any number of divisions in width corresponding to the folds in the old-fashioned folding blinds. They require no hinges—all trimmings furnished with blinds—are made of all woods, finished or unfinished.



The Blind manufactured throughout the United States and Canada by the members of the HILL SLIDING BLIND ASSOCIATION, is the only sliding Blind ever put into practical and general use, or that has been adopted and used by the leading architects and builders, both East and West.

It is rapidly displacing the objectionable folding blind, also shades, which since they have ceased to be considered the fashion, are used principally in cheap dwellings and tenements.

The Hill Blind is the only sliding blind made of white cedar, and where the grooved slide can be used as the window stop, or placed on the pulley stile, similar to the ordinary stop—the slide is only 2 1/2 inches wide—plenty of room can be obtained by setting the casing flush with the pulley stile, in light studded buildings. NOTE.—Any other sliding blind using the slide as the stop for the sash, is an infringement of our patents of February 26, 1884, and February 24, 1886, and anyone selling, using, or making such a blind will be prosecuted by the HILL SLIDING BLIND ASSOCIATION, as they are determined to stop the sale of several cheap and worthless imitations.

The Hill Sliding Screen, working the same as the blind, is the only screen covering one-half of the window, which will remain at any desired point, and which can be instantly removed, when not required, or to clean the windows.

Over eight thousand sets have been specified and put in, throughout the Pacific Coast, since April 1, 1885.

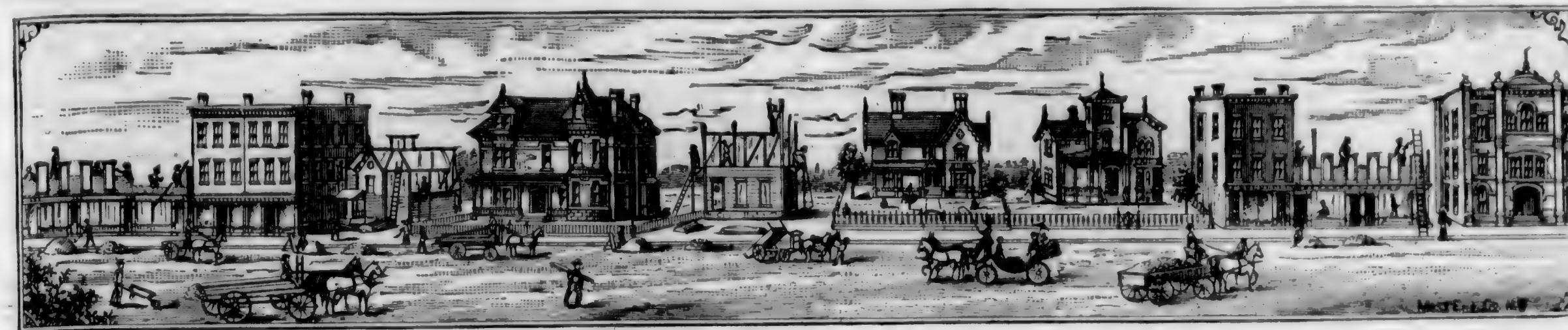
We refer to the following prominent architects of San Francisco, who have used or specified the Hill Blind and Screen; also hundreds of owners throughout the Pacific Coast:

Miller & Armitage, Pissis & Moore, H. D. Mitchell, John Marquis, John M. Curtis, Moore & Schultze, J. T. Kidd, J. H. Humphreys, T. J. Walsh, Jas. E. Wolfe, Townsend & Wyneken, Chas. J. Devlin, Geo. E. Voelkel, Copeland & Banks, M. Balczynski, Edw. R. Swain, Chas. V. Pierce, S. & J. C. Newson, Wm. Mooser, Chas. Geddes, Macy & Jordan, H. T. Bestor, A. A. Bennett, Seifeld & Hohlberg, A. J. Barnett, John J. Clark, G. V. Capelletti, P. R. Schmidt, M. P. Schetzel, Clinton Day.

HINDE & MURRAY,

Main Office and Factory, 411 Mission Street, Corner of Fremont.

Sole owners of the right to SELL and MANUFACTURE for the Pacific Coast, except Counties of San Diego, Los Angeles, San Bernardino, Santa Barbara, Kern, San Luis Obispo, and Ventura in California.



COUNTRY BUILDING INTELLIGENCE

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

Alameda.

J. Cordes is building a very handsome two-story house on Briggs Avenue, near Ninth Street, to cost \$4,000. C. H. Foster is the contractor.

J. B. Finley is remodeling his cottage on Alameda Avenue, near Willow Street, at a cost of about \$2,200.

Work has been commenced at the Clark Pottery Works upon a new fire-brick kiln, which will have a capacity for 40,000 bricks.

Joseph A. Leonard, the architect, has associated himself with A. H. Todd in the real estate, house-building, and house letting business. The firm name is now Todd & Leonard.

Alterations. Owner, John Wulzen; architects, John & Zimmerman; contractor, R. Wadell; cost, \$2,500.

Berkeley.

J. L. Barker has two houses in Berkeley under way, to cost \$2,000 each.

Dr. George M. Baronidas appeared a few weeks ago before the Berkeley Trustees, and stated that he and his associates were preparing to build a \$150,000 hotel, four stories in height, with a bank and drug store on the ground floor; also to erect a large bath-house, 60x80 feet, covered with colored glass, to be used for hot and cold-water baths.

P. S. Glasford is having a \$1,700 cottage built on the Hillegas Tract, by C. R. Lord.

J. B. Cogswell has agreed to erect a house for Mrs. H. Gross, to cost \$3,100. Percy & Hamilton are the architects.

A. H. Broad has agreed to do the carpenter work on a building for A. Carlisle, on the corner of Vine and Spring Streets. The contract price is \$2,720.

Oakland.

George E. De Golia is having a very pretty modern cottage built on Hobart Street, near Telegraph Avenue. A. W. Pattiani & Co. are the architects and contractors, and the price is \$1,302. It will be completed by the first of next month.

The California Mill has the contract for the mill work on St. Mary's College, for \$16,921. The Mill Company has filed a bond in the sum of \$10,000, with C. F. Doe and W. J. Adams as sureties.

The proposed Presbyterian Church of Temescal will cost \$8,000.

A nine-room residence is being built for Mrs. J. P. Mene, on Hobart Street, to cost \$5,000.

Councilman Wilson's five cottages on Hobart Street, near San Pablo Avenue, are well under way.

A handsome residence is being built by G. W. Kelly on the Glen Echo Tract, to cost \$8,000. W. T. Veitch has the contract.

C. W. Gibson has had Charles Mau draw the plans for a two-story flat house, to be situated on Alice Street, between Twelfth and Fourteenth Streets. It will have a frontage of thirty feet, with a depth of seventy feet, and will be of two stories, with six rooms and bath on each floor. The cost will be about \$5,000.

Dr. A. Cane is having a handsome house built at Klinkerville, to cost \$4,068. It is a handsome two-story building, with all modern conveniences. J. T. Quirk is the contractor, and W. Winterhalter was the architect. It is to be finished by December 30. The contractor has filed a bond of \$4,000 with Frank Johnson and D. F. McGraw as sureties.

J. S. Greenleaf is having a house built by Woodhouse & Sandy, at Klinkerville, to cost \$2,300.

Pomona.

Killam & Wethercot send the following list of buildings for which they are architects: J. M. Howard, \$3,000; J. W. Goodwin, \$3,200; I. M. Case, \$2,600; A. H. Summers, \$3,500; additions to Presbyterian Church, \$2,500; J. A. Drifill, \$3,200. In addition to the above, there are in course of erection the following: Congregational Church, \$5,000; R. M. Kirkland, \$3,500; R. G. Hamilton, \$2,500; George Way (2), \$4,000; A. F. Crank, \$3,300; J. J. Burdick, \$4,000.

Portland, Or.

Otto Kleeman, the architect, has prepared the plans for a large family hotel to be built on the corner of Fourth Street and Holladay Avenue, for Logus & Burkhard. It will be three stories high, in modern Gothic style, 100 feet deep and 150 feet front. The center tower and observatory will be 105 feet high. The rooms will be laid out in suites, with bath-rooms and all modern conveniences to each. There will be a grand staircase and elevator, besides two side staircases and a freight elevator. The grounds will be laid out around the whole block in walks, with shade trees. The basement and foundation will be of brick, and the other stories of wood, but finished in the finest manner. The estimated cost of the building, without furniture or work on the grounds, is \$65,000.

Contract has been let for completion of the Harrison Street school-house. It will cost, complete for occupancy, about \$15,000.

I. W. Baird offers to erect a \$50,000 theater, if citizens will subscribe a sufficient sum to buy a site for the same.

San Jose.

John Auzeais is having a two-story brick building erected at a cost of \$18,000. Theo. Lenzen is architect; M. D. Green, contractor. G. Peirana is adding a second story to his brick building. Theo. Lenzen is architect; Drew is contractor. Cost, \$5,000.

Additions are being made to the Odd Fellows' old hall. Owner, R. Roberts; architect, Theo. Lenzen; contractor, J. D. Stewart. Cost, \$6,700.

Theo. Lenzen is also architect for F. Baumgardner's \$5,500 building, and also for addition to M. Appleton's house. Cost, \$2,000.

Following are the bids received on the Auzeais building, mentioned above: H. Clifton, \$16,275; Fuller & Lashbrook, \$15,850; M. D. Green, \$15,800; W. S. Boyle, \$16,127; Thomas Livingstone, \$16,125; E. A. Van Dalsen, \$15,987; J. D. Stewart, \$15,965; A. J. McIlvain, \$15,963.

San Luis Obispo.

The new hotel, to cost \$110,000, which has already been commenced, will be finished in course of six months, a great benefit to the town.

It is settled definitely that the magnificent Andrews Hotel is to be rebuilt.

Mr. Crocker will commence building a brick store on the southern corner of Higuera and Garden Streets, 45x90 feet ground dimensions, and one story in height. The building will cost about \$8,000. Architect Laird has the plans nearly completed.

Contractor I. L. Wilson is now at work on two cottages. One is for Mrs. Kiddoo, and will cost \$1,800, and the other is for Mr. Latimer, and will involve an expense of \$2,100.

A great necessity of this city is a commodious theater building, with all the modern appliances. It is said that L. M. Warden contemplates erecting such an edifice on his lot on Higuera Street, near Chorro Street.

In the meantime in all the towns south of San Luis Obispo—at the Avila Hot Sulphur Wells, Ynocenta, Arroyo Grande, Nipomo, Santa Maria, Santa Ynez, and Los Olivas, a good deal of building is already under way, or is contemplated, and the next year will see many important improvements. Architect Laird has lately completed plans for an elegant hotel to be erected on the last-named place, to cost \$10,000; and a large depot is also to be built very soon.

Contractor Hampton has commenced work on the Marsh Street bridge.

Miscellaneous.

PROPOSALS FOR BIDS TO BE RE-ADVERTISED FOR THE NEW CITY HALL, LOS ANGELES.

The following bids for the new city hall have been received:—

CARPENTER WORK.

W. O. Burr.....	\$109,100
Robert Smiley.....	98,779
A. Washburne.....	99,888
F. E. Greene.....	128,600
W. R. Phelps.....	116,150
A. F. Mackey.....	116,000

BRICK WORK.

James W. Wadsworth.....	\$ 98,171
-------------------------	-----------

PLUMBING AND GAS.

W. C. Furrey.....	\$ 6,000
H. Williamson.....	4,344
Wm. Henderson.....	5,350

It was decided that the three lowest bids would make the cost of the building too much, and it was resolved that bids for the construction of the whole or in part be re-advertised for, returnable on Monday, the 24th instant. The architects, Caukin & Haas, were instructed to cut off as many of the extras as possible, in order to bring the building as near the limit, \$150,000, as possible.

J. S. Landon is building a \$2,000 cottage in Pasadena. Hill & Dean are the contractors.

T. H. Goff, the architect, is drawing plans for a fine three-story brick building to be erected on Third Street, San Bernardino.

The contract for building J. C. Herrington's residence, in Fresno, has been awarded to A. Jackson, for \$3,700. The structure will be a two-story, on North J Street, between Tuolumne and Calaveras Streets.

J. M. Saffell is preparing plans for J. C. Herrington's \$5,000 house in Fresno.

The trustees of the new Catholic Seminary in San Rafael will shortly commence work on the \$70,000 contemplated building.

The Southern Hotel Co. of Tulare City are preparing to build a \$40,000 hotel. Consult architects, McDougall & Son, of San Francisco.

In Los Angeles it is understood that the Southern Pacific Railroad Co. are intending to build an \$80,000 depot. Also a \$40,000

building for same purpose is contemplated by the Atchison, Topeka & Santa Fe Railroad.

It is understood that the contract has been let for the Terracina Hotel, at Redlands. Full particulars may be had by addressing T. A. Goff. Over \$30,000 will be used.

The Presbyterian Church Society of San Diego intend to erect a \$25,000 church. Address Reid Bros., architects, for full particulars.

The East Riverside Improvement Co. will commence the construction of a new hotel right away, to cost, when completed and furnished, about \$21,000. Bricks for the foundation are now on the ground. A contract has been made to build a fine railroad station before January 1. The Improvement Company has contracted to furnish the railroad company with water. The building of an \$8,000 school-house will be commenced very soon. S. H. Herrick, of Riverside, is the manager of the company.

SAN FRANCISCO BUILDING NEWS.

A

Ashbury, nr. Frederick. Two-story frame.
O. and B.—W. Lewis.
\$10,000.

B

Bay, bet. Hyde and Larkin. One-story frame.
O.—A. Hanson.
C.—G. M. Salisbury.
\$2,000.

Brannan, bet. Fifth and Sixth. Alterations to French Hospital.
A.—Pissis & Moore.
\$1,800.

Brannan, cor. Eighth. Two-story frame.
O.—Mrs. Romely.
\$2,000.

Broderick, nr. Hayes. Two-story frame.
O.—C. G. Brunsch.
A.—Townsend & Wyneken.
C.—A. McElroy.
\$3,800.

Baker, cor. California. Two-story frame.
O.—P. Connelly.
C.—F. Roettger.
\$3,500.

Berry, bet. Third and Fourth. One-story frame.
\$500.

Broderick, nr. Fourteenth; two-story frame.
O.—Mrs. C. Dixon.
A.—A. J. Barnett.
C.—T. Sullivan.
\$4,000.

C

Clementina, nr. Fifth. Additions.
\$1,000.

Capp, bet. Twenty-fifth and Twenty-sixth. Two one-story frames.
O.—C. O. Smith.
\$5,000.

Capp, bet. Twenty-first and Twenty-second. Frame building.
O.—J. D. Spreckles.
A.—C. Geddes.
C.—Geo. Lang.
\$5,500.

Clay, cor. Dupont. Brick building.
O.—L. J. Harvey.
A.—C. Day.
C.—R. Mitchell.
\$35,000.

Calvary Cemetery. Brick vault.

O.—Estate of Mary Rogers.
A.—John & Zimmerman.
C.—Comuth & Briggs.
\$4,500.

Clay, bet. Hyde and Leavenworth. Two-story frame.
O.—Annie Pomeroy.
A.—Curtlett & Cuthbertson.
C.—A. Jackson.
\$7,000.

D

Dolores, nr. Twenty-third. Two-story frame.
O.—E. P. Enas.
A.—S. and J. C. Newsom.
C.—J. H. McKay.
\$4,500.

Dolores, cor. Twenty-ninth. One-story frame.
O.—T. Roy.
C.—R. Bergfeld.
\$1,800.

E

Eighth, nr. Howard. One-story frame.
\$1,500.

Eighth, nr. Harrison. Additions.
\$1,500.

Eighteenth, cor. Sanchez. Alterations.
\$1,000.

Eleventh Ave., nr. Railroad Ave. Two-story frame.
O.—G. Kelly.
A.—C. Rinz.
\$3,500.

Ellis, bet. Steiner and Pierce. Two-story frame.
O.—E. Aigeltinger.
A.—John & Zimmerman.
C.—R. O. Chandler.
\$3,500.

F

Fillmore, nr. Fell. Two-story frame.
O.—Annie Hill.
A.—Townsend & Wyneken.
C.—C. Coady.
\$4,500.

Folsom, nr. Third. Additions.
\$3,000.

Folsom, bet. Twenty-third and Twenty-fourth. Additions.
O.—Mary Phillips.
A.—H. Geilfuss.
C.—Schutt & Precker.
\$2,200.

Folsom, nr. Fifth. Additions.
\$1,000.

Fell, nr. Fillmore. Two-story frame.

C.—J. Houston.
\$3,500.

Fillmore, nr. Hayes. Additions.
O.—Vaultman.
\$2,500.

Fifteenth, bet. Valencia and Guerrero. Three one-story frames.
O.—Mrs. Crane.
A.—C. Geddes.
C.—Doyle & Son.
\$6,000.

Fifth, cor. Clementina. Four-story frame.
O.—H. Voorman.
A.—S. and J. C. Newsom.
C.—S. Walker.
\$16,000.

Fifth Ave., bet. M and N. Frame building.
O.—Mr. Brown.
C.—Elliott.
\$4,000.

Fifth Ave., bet. M and N. Six one-story frames.
O.—R. Giles.
\$5,000.

Fremont, cor. Howard. Three-story frame.
O.—Fulton Iron Works.
Day work.
\$15,000.

Franklin, bet. Broadway and Pacific. Two-story frame.
O.—Zadig.
A.—Pissis & Moore.
C.—Moore Brothers.
\$8,000.

C

Grove, cor. Buchanan. Two-story frame.
O.—Julia Sullivan.
C.—Stiles.
\$3,500.

Geary, bet. Grant Ave. and Stockton. Four-story brick.
O.—J. P. Whitney.
A.—C. Day.
C.—J. McCarthy.
\$75,000.

Guerrero, nr. Twenty-sixth. Two two-story frames.
O.—V. Chaigneau.
C.—F. W. Kern.
\$7,000.

H

Haight, nr. Webster. Two-story frame.
O.—L. Schwalm.
C.—G. Houston.
\$4,000.

Hayes, nr. Webster. Two-story frame.

O.—Kirshbaum.
A.—Chas. Geddes.
C.—L. B. Jones.
\$10,000.

Harrison, cor. Twenty-second. Frame building.
O.—Gibson.
A.—M. J. Welch.
C.—A. Klahn.
\$2,000.

Howard, bet. Main and Spear. Brick building.
O.—Payne Brothers.
A.—Curtlett & Cuthbertson.
C.—Moore Brothers.
\$16,000.

Hubbard, nr. Folsom. Alterations.
O.—S. M. Hills.
\$3,000.

Hubbard, nr. Howard. Alterations.
O.—Sharon estate.
C.—S. M. Hills.
\$1,500.

Howard, nr. Hubbard. Alterations.
O.—Breslau & Co.
C.—Fiege.
\$2,500.

Hayes, nr. Webster. Additions.
O.—O. Commery.
\$2,000.

Howard, bet. Second and Third. Building constructions.
\$1,200.

Harrison, bet. Ninth and Tenth. Three-story frame.
O.—J. Dwyer.
A.—M. J. Welch.
C.—McCreedy Brothers.
\$4,500.

Haight, nr. Buchanan. Additions.
O.—J. Bock.
C.—Zwierlein & Pavel.
\$2,800.

Herman, bet. Fillmore and Steiner. Cottage.
O.—Mrs. C. Hummelman.
A.—John & Zimmerman.
C.—A. Miller.
\$2,500.

I

Iowa. Two-story frame.
O.—M. Johnson.
\$3,500.

J

Jackson, cor. Octavia. Two-story frame.
O.—Emil Sutor.
A.—Pissis & Moore.
C.—A. Jackson.
\$11,000.

Jackson, bet. Larkin and Polk. Alterations.
O.—Chas. Sageborn.
A.—John & Zimmerman.
C.—G. F. Knorpf.
\$3,500.

L

Laguna, nr. Clay. Two-story frame.
O.—R. C. Chambers.
A.—Matthews & Son.
C.—Littlefield.
\$10,000.

Lewis, bet. Taylor & Jones. Frame building.
O.—J. V. Bretonelle.
A.—Wm. Mosser.
C.—Kincaid & Thompson.
\$4,700.

M

Market, nr. Sanchez. Additions.
O.—G. Smith.
A.—W. H. Armitage.
C.—A. McDonald.
\$900.

Market, cor. Eighth. Frame constructions.
\$2,500.

Morton, nr. Stockton. Alterations.
\$500.

Montgomery, bet. California and Sacramento. Alterations.
O.—Mrs. A. M. Parrot.
A.—Pissis & Moore.
C.—Gonyeau.
Mason work—Riley & Loane.
\$10,000.

N

Nineteenth, cor. Noe. Alterations and additions.
O.—H. A. Dahler.
C.—A. Miller.
\$2,500.

O

Octavia, cor. Pacific. Two-story frame.
O.—Mr. Theller.
A.—W. Smith.
C.—S. W. Kern.
\$4,500.

Oak, bet. Scott and Devisadero. Two-story frame.
O.—E. Huebner.
A.—John & Zimmerman.
C.—F. W. Kern.
\$5,000.

P

Pine, cor. Baker. Two-story frame.
O.—L. Aronson.
A.—Copeland & Banks.
C.—J. Bruce.
\$5,000.

Pine, nr. Lyon. One-story frame.
O.—F. Hart.
A.—A. J. Barnett.
C.—Doyle & Son.
\$2,000.

Pine, cor. Baker. Two-story frame.
O.—J. F. Kaufman.
A.—Copeland & Banks.
C.—J. Bruce.
\$4,200.

S

Sutter, cor. Pierce. Five two-story frames.
O.—S. Siegle.
A.—Salfeld & Kohlberg.
C.—T. Steinman.
\$16,000.

Scott, bet. Clay and Sacramento. Two-story frame.
O.—C. E. Doughty.
C.—J. P. Shepard.
\$4,000.

Sanchez, cor. Seventeenth. One-story frame.
O.—J. G. Hill.
A.—Woods.
C.—G. S. Gillespie.
\$2,500.

Sanchez, cor. Nineteenth. One-story frame.
\$2,500.

San Jose Ave., nr. Twenty-fifth. Two three-story frames.
O.—B. F. Harris.
Day work.
\$5,500.

Seventeenth, cor. Noe. Two two-story frames.
O.—I. E. Blood.
C.—W. J. Pierce.
Day work.
\$7,500.

Sansome, bet. Pine and California. Four-story stone front.
O.—M. Heller.
A.—Wright & Sanders.
C.—Sanchez.
Stone work—McClellan & Redmons.
Brick work—Mitchell.
Carpenter work—Ed. Farrell.
Plumbing work—Wilson.
\$80,000.

T

Thirteenth Ave., nr. W. One-story frame.
O.—F. Hunter.
\$1,200.

Twenty-eighth, cor. Dolores. Additions.
O.—J. Comerford.
\$1,000.

Turk, nr. Steiner. Two three-story frames.
O.—M. Trespaille.
A.—J. E. Kidd.
C.—Kincaid & Co.
\$12,000.

Twenty-first, nr. Sanchez. Two-story frame.
O.—Nolt.
A.—C. Curtis.
C.—Sanchez.
\$4,500.

Twentieth, cor. Collinwood. Two-story frame.
O. and B.—F. De Guerre.
\$2,500.

W

Twenty-first, nr. Sanchez. Two-story frame.
O.—H. S. Gray.
A.—Bordwell.
C.—H. S. Gray.
\$4,500.

Turk, bet. Leavenworth and Hyde. San Francisco Turner Hall. Alterations.
O.—San Francisco Turnverein.
A.—John & Zimmerman.
C.—G. F. Knorpf.
\$1,500.

Washington, nr. Broderick. Two-story frame.
O.—D. Richards.
A.—C. Havens.
C.—C. Quinn.
\$6,000.

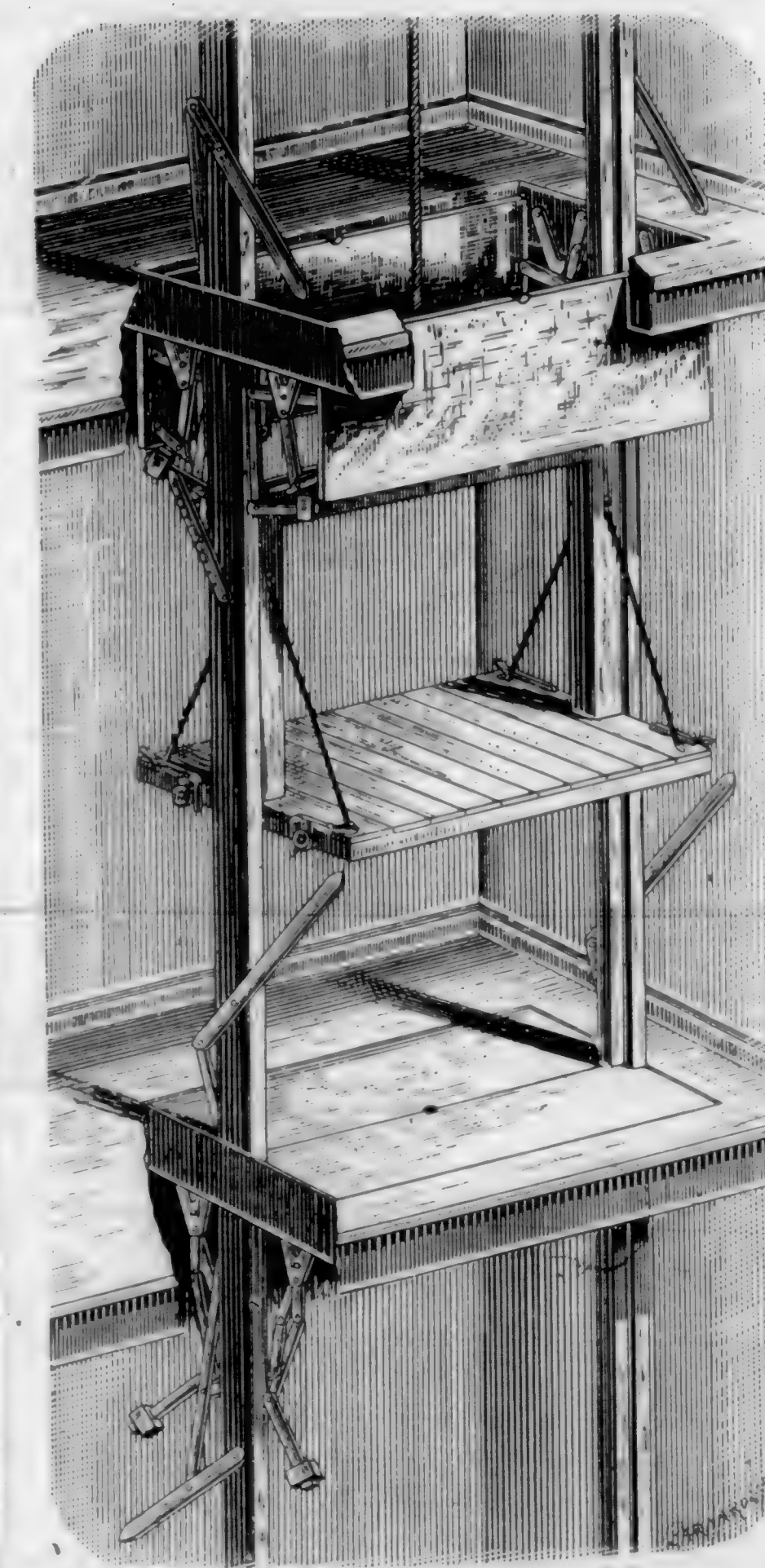
Washington, cor. Polk. Frame building.
\$500.

Washington Ave., nr. Howard. Alterations.
\$600.

THE PAGE

Automatic Fire Shutter Co. of California.

The Best Automatic Fire Shutter Known.
INCORPORATED APRIL 29TH, 1887.
Manufacturers Under United States Patent of the Automatic Shutter.



ADAPTED TO PASSENGER AND FREIGHT ELEVATORS,
For Protection from Fire in Elevator Shafts, and from Liability to Accident.

PATENTED MAY 10, 1887.

Now in operation at 22 and 24 Jessie St., and 327, 329, 331 Sansome St., S. F. Call and examine the same.

The cut represents a freight elevator, showing two floors of the building. The elevator platform is represented as ascending, having passed through the hatchway of the lower floor. The shutters below the elevator platform have just closed level with the floor, completely and firmly closing that hatchway. The shutters of the second floor are next being opened by the ascending elevator platform, and after it has passed through, these close automatically, in the same manner as the shutters of the first floor. In the descent of the elevator platform, the shutters open below as it approaches the hatchway, and after passing through, they close again firmly and completely. Each shutter opens and closes automatically as the elevator passes, and are so counterbalanced as to offer no resistance to the ascending or descending platform.

H. W. SEVERANCE,
Manager and Agent,
Office, 218 California Street, San Francisco, California.

The Clerk of the Works.

THE term and business of the clerk of the works are practically unknown in this country. In England the clerks of the works constitute quite a large class, have their own society, and form a useful, prosperous, and intelligent body of men. Here, a synonymous term would be building superintendent. In both countries the general custom is for the architect who draws up a design to personally superintend its execution. This necessitates a visit to the job once a week, or oftener, according to its extent. But when a building in course of erection is very large, as, for instance, a city hall, a private mansion, or any other building of great extent, the works need, in the interest of the owner, a constant supervision, and so the business of the professional clerk of the work arises. The custom of employing such a superintendent is much more common in Great Britain than it is here—in fact, in the former country few jobs of any considerable extent are carried out without his aid.

The duties of a clerk of the works are essentially those of superintending the construction of a building, as a deputy for the architect. He has to see that the work is carried out exactly in accordance with the drawings and specifications. He cannot alter any of the construction on his own responsibility; neither is

he supposed to interfere directly with the work of the mechanics. His orders are, however, by courtesy, accepted by the contractor and foremen, and it is not seldom that his personal knowledge is of great benefit to the workmen in helping them out with any complicated or difficult problem arising in the construction. One of his most important duties is to examine the whole of the material delivered upon a job, and to reject any portion which is not of the specific quality. Another is to take measurements, and keep a list of any extra work which may arise during the course of the erection of the building, and in like manner to keep an account of work not carried out in consequence of alterations being made in the original plans, so that due allowance may be made for them. As a rule, the clerk of the works is a mechanic, often a carpenter or mason, who is above his fellows in intelligence and knowledge. Sometimes a draughtsman will act in this capacity, but the necessary and very intimate knowledge of construction and of the characteristics of good materials is such that few are other than advanced mechanics of extensive practical experience. The salary usually paid may be said to be about twice that of the carpenter or mason, and many a young mechanic will study hard in his leisure hours in the hope that he may eventually get to be a clerk of the works.—*Ec.*

Provincial Royal Jubilee Hospital.

TO ARCHITECTS.

Designs, Plans and Specifications are invited for the above building, in accordance with memorandum of particulars, copies of which, together with contour plans of the site, may be obtained on application to the undersigned. A premium of \$800 will be paid for whichever designs and plans, if any, may be adopted. Such designs, plans and specifications to become the property of the Provincial Jubilee Royal Hospital Building Committee.

Plans for this building to be addressed, in sealed envelope, to the undersigned, and to be handed to him by or before noon of the 7th of December next.

WILLIAM CHUDLEY, Hon. Secretary,
Sept. 13, 1887. Wharf St., Victoria.

CIVIL ARCHITECTURE,
A SPLENDID WORK,
PRICE, \$10.00.

Lumber Market.

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

Pine, Rough, per M. feet.....	\$22 50
Pine, Rough, No. 2.....	18 50
Pine, Rough, 40 to 50 feet lengths.....	23 50
Pine, Rough, 50 to 60 feet lengths.....	24 50
Pine, Rough, 60 to 70 feet lengths.....	25 50
Pine, Selected.....	26 50
Pine, Clear.....	33 50
Pine, Fire Wood.....	10 00
T. & G. Flooring, 1x6.....	35 00
T. & G. Floorings, 1x6, 1x4, 1x4, and narrow.....	40 00
T. & G. Flooring, No. 2.....	29 50
Stepping, No. 2.....	45 00
Redwood, Rough.....	32 50
Redwood, Rough, No. 2.....	22 50
Redwood, Surfaced.....	37 50
Redwood, T. & G. 6 in., 12 feet and over.....	34 00
Redwood, T. & G. 6 in., 7 to 11 feet.....	27 00
Redwood, T. & G. 6 in., under 7 feet.....	24 00
Redwood, Rustic.....	37 50
Redwood, Rustic, No. 2.....	32 50
Redwood, Rustic, 12 feet and over.....	36 00
Redwood, T. & G. Beaded, 7 to 11 feet.....	27 00
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THE CALIFORNIA ARCHITECT AND BUILDING NEWS.

VOLUME VIII.

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Advertisements alone inserted that refer to materials used in the construction and furnishing of houses, and to matters and trades belonging to the building interest.

No Others Received.

SAN FRANCISCO, CAL., DEC. 15, 1887.

OUR WEEKLY EDITION.

The initial number of the Weekly Building News made its appearance last week. The regular issue will not commence until January, 1888. For over four years this journal has been printed in Oakland, and, not wishing to change, we made arrangements to have the Weekly also published there. But we find the labor too great; so we have completed all the necessary contracts to have the same published in this city. After the first issue the WEEKLY BUILDING NEWS will appear regularly on Monday of each week.

GOVERNMENT WORK.

We have received authority from the Government at Washington by which contractors will be notified of all work to be done for same on this coast. Other arrangements are being actively consummated by which the WEEKLY BUILDING NEWS will be THE medium for contractors for all description of work to obtain the newest items in regard to any public work—city, county, country, or Government.

Close of the Ninth Volume.

WITH this issue we close the ninth volume of this Journal, and in so doing we again desire to thank our patrons for favors received during the past year and also for the past nine years. Looking over the pages as they are now presented and comparing them with those of nine years ago, we cannot help expressing our deep obligations to all who have stood so nobly by us. For nine years, in each successive issue, we find the same familiar "ads," many of them occupying the same spaces as when they started in 1879. For nine years the same editorial pen has held sway over the various articles presented. We feel that we have given satisfaction to our patrons. No opportunity has been allowed to pass to improve this journal in every manner. We have carefully studied the wants of our readers and endeavored to give satisfaction to all. We will use renewed efforts in 1888 to make this journal equal to any published. To do so, however, we need a little more assistance from members of the architectural profession. Promises have been made by the score. What we need, however, is action. Make a business of it to send to this office, at least three times a year, an article on any subject of which you have made a study. Send us sketches of original ideas used in your various elevations and details. Full credit will be given in each and every case. Again thanking all for their generous support during the past year and trusting a renewal of the favors for 1888, we lay down our pen on the editorial work of 1887, and wish one and all a Merry Christmas and Happy New Year.

The City Hall Imbroglio.

SOME time ago bids were called for by the City Hall Commissioners for completing the Larkin Street wing of the New City Hall. Upon opening the bids the following were found to be the contestants:—

Headley & Morehouse.....	\$81,755
Charles C. Terrill.....	82,000
John McCann.....	86,560
Albert Washburn.....	84,800
McGowan & Butler.....	64,800

It was readily apparent to the Commissioners and those present at the opening of the bids that a screw was loose somewhere. It hardly seemed possible that four bids should be handed in with less than \$5,000 difference between them and then one of our most reputable contracting firms should be about \$17,000 lower than the next lowest bid.

Upon investigation it was soon discovered that a pool existed between the first four named, and that strenuous but unsuccessful efforts had been made to induce the fifth one to join. We do not propose to enter into full details in regard to the affair. The editor of this journal being on a visit East, and having left the charge of the journal in the manager's hands, we frankly admit that we do not feel competent to deal with the same upon his return. We will say, however, we admire the manly stand taken by Charles C. Terrill. He frankly admitted that he considered the business of pooling issues as perfectly legitimate. Lumbermen have pooled on their products, brick manufacturers on theirs, and so on, and why should not contractors, when the conditions of the contract were very hard, do the same thing.

[While admitting the manly way in which Mr. Terrill addressed the commissioners, we wish it distinctly understood that we do not indorse his opinions.—MANAGER.]

Quite in contrast was the action of another bidder who admitted that he had put in a bid but had never read the advertisement or specifications. He stated that there was a man who could go to the commission and burst up McGowan & Butler's contract. Auditor Strother, in the manly, independent manner for which he is noted, told Mr. Headley—the bidder referred to—that the man who said he could do such a thing was "an infamous liar." When pressed to name the man who had such a "potent pull," it turned out to be one of Headley's own bondsmen. He also admitted he had offered Butler \$5,000 for the contract.