VOLUME 1.
NUMBER 1.

## SAN FRANCISCO, JANUARY 1, 1880.

1.50 per Annum, in Advanoe

Single Copies, 15 Cent

## The Cedlifotuia surchitect

 BUILDING REVIEW.san prancisco architectural poblishing co.
JAMES E. WOLFE, Editor and Manager.
Sent to any part of the U. S., postage paid, at $\$ 1.50$ sent to Foreign Countries
Its columns will be devoted to the best interests of all
partiec, whose interests are reprcesented or involved in its general character, not excluding occasional articles calcula ted the please those who love chanels of pure thought, and
moral training The higher, better, and exactly truthful in
all matters, wili be bought for all matters, wili be bought for. It will be free to refer to existing wronge and abuses, in whatever direction they way
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obtained from the mont reliable sourres, never bending to serve the special interexts of any person or persons, but
giving true and correct reports, for the inforniation of all its readers. Its improvernent in every department will rewith the very betan of its ko thd now published. The special
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## ADUERTISING RATES.

On outside of front cover, and page folliowing Build-
ing Intelligence, per suare, each insertion...... Outside of back cover, saqd page, next preceding read
ing matter, per square, esch inseriton.......... With reasonable reductions for larger spaces, and adve
tisements cuntinued for six or 12 months.

## Our First Monthly Issue

This first number of the California Architect and Buimens' Review, in troduces for public consideration and patronage the first issue of the first
subscription subscription journal ever published on the Pacific ical, Sanitary, and other kindred matters and subects. The simple assertion, without stated reasons that such a, publication is a necessity in San Fran reasonably induce an inquiry as to theut proof, and correctness of the presumption of necessity answers to this question are as follows
First.-That all interests, avocations, callings, and pursuits in life, whether scientific, professional mechanical, artistic, commercial, literary, or oth erwise, must necessarily be more correctly and in jelligently represented through the columns of a purposes of its publication. Such journals, also, rovide a medium through which the fundamental fiples, practices, theories, and governing rule laimed, and important issues, principleserly pro tions diecussed. And while they finces, and quesinformation to the general public, they induce betar understandings, encourage harmonies, awaken mbitions, correct irregularities, inspire generous confidence, and lead to a thousand beneficial results mong those whose special interests are represented hecongh their columns.
and beliefs, greatly at variance opinions, impressions, and beliefs, greatly at variance with the truth in other countries in in many parts of our own and Pacific Ooast generally, is a well-understod the It is necessary that as far as possible all fact should be corrected; and this journal, with a cir-
eulation already extending to every State in the
Union, and to cities in Europe, with a rapidly increasing subscription-list, give assurance that it will enjoy and exert a very extended influence in
correcting correcting wrong impressions, and placing this
coast in a proper light before the world coast in a proper light before the world. And as
each succeeding issue will the more fully extablish each bucceeding issue will the more fully establish
the fact, that truth, accurucy, and reliability are the go fact, that ruth, accurucuy, and reliability are the
goveming rules of its management, its illustrations, statements, and representations; will be accepted as correet, and by them, opinions and judgments abroad will be formed and established. In this special viow of the case, every citizen of California should subsoribe for it, and support it by every influence in his power, so as to render it a
unerring and permanent representative journal. unerring and permanent representative journal.
Thirdy $=$. Such a journal is especially necessar in San Francisco, for the reason that in conneetion with the architeotural profession, and the buildin business on this coast, there has always existed greater diversities, divergencies, and opposing
views in reference to matera well-understood, regulated and establishe? procedure, than exist in older and longer-estab lished communities-where apprenticeship oxperiences are considered necessary to prepare for the practice of the profession, and mechanics, as a rule ticeship servic, Buagh regular terms of appren ferent in these respects the able and competent centlemen in the pre are many heretofore stated in the QuAltery itects have gathered on this coast from alme arch quarter of the globe, each bringing with him, and praoticing the architectural ideas, pre-conceived notions, national prejudioes and pride, incoulcated
and matured under systems-and circumstances and matured under systems-and circumatances pe-
culiar to each several section of country or com culiar to eace several section of country or com-
munity represented. The natural consequence of all this is, diversities of views and practices, not carculated to insure antire harmony in general op
erations. In addition to these special features it may also be stated as a fact that many features, it in California have entered into the practice of the profession, without having received any architect ural education, other than that obtained from experiences in practical building, and from personal studies and application. These suggestions are not
made to disparage or question the competency made to disparage or quastion the competency or abilities of any gentleman in the profession, but to
indicate the peouliar surroundings. Although every arohitect in the State may be fully qualified to disoharge correctly, the duties and responsibili ties of the profession, in the light of his own conceptions, the fact nevertheless remains, that there are those sectional and national interventions, L \&s evenly regulated state of thing must create a as this journal is ited state of things. Añd so far recommendations concerned-while its theories and hose, who, from studied and set practices and habits, are persistent in the advocacy of their individment will be to present and purposes of its managetained aryuments and views of maters, and sus as will receive the approval of thase gho gerally, the doctrine, that while men live, they may continue to learn, and that outside of themselves, there are fountains of information and knowledge, from which they may derive iustruction. The intelligent reader will, from all this, readily comprehend the peculiarities of the situation, and the necessity
that must exist for a journal of this character, devoted, not only to the discussion of matters of genvoted, not only to the discussion of matters of gen-
eral information and interest, but to subserve the purpose of creating uniform systems of practice and purpose of creating uniform systems o
good understanding in the profession.
Fourthly.-It is also a necessity, as far as the general public are concerned, in giving reliable in formation in all matters connected with the im-
provement of real estate, furnishing suggestions to proper methods, advising for and against the uses of things, beneficial or injurious, as the case may be, and in various ways, establishing correct opinions and conclusions at home and abroad, in ing pursuits on the Pacifio Coast

## Illustrations.

We expected to present in our first issue, for the fice, but the drawings fuiled doesign of a publio ed time. If our good patrons will exercise a hittle pa tienoe, arrangements will soon be completed, whicl will render excuses unnecessary, in this or any othe connection. One of the illustrations appearing represents the front elevation of Messrs. Sol. Wan Yenheim \& Co's building, situated on the east sid section, $33 \times 117$ feuth of Sacramento. The corne the intention of co, was erected in 1877-8, with day. The buildiny erected, the block at an early
day inaining portion of the lot, and the old buildi the ing thereon, have been, and are now used by the firm in their extensive hermetically-sealed presy firm fruits, meats, fish, etc., manufacturing business The double plate presents the design of a building intended for erection on the west side of Frauklin street, north of Sacramento street. The lot was, how over, improved with a less costly edifice. A building
erected in conformity' with the degit make a very handsome appeut design shown, will cost house. In the hands of any of the a moderat architects in this city, it can be modified or proved to suit. Its cost as originally contemplated some three years ago, was ahout $\$ 13,000$, including grading of the lot and fence-work.

Apoiogies.-We dislike them, and hoped we Would have been spared the necessity of offering any in connection with this journal. But painful
personal interruptions have personal interruptions have materially interfered with intended promptness and completeness in our
first monthly issue. We simply state first monthly issue. We simply state this on our o sympathize or censure, as they may feel inclined e hold as a rule, that in the publication of a dabacription work of uny sort, its patrons have nd innor promptness, regularity, and fair dealing nossibovations upon theso, from any cause within phene control, is a wrony committed for which hort of ofsts no right of excuse. Consequently, helpless, there will be no interruptin powers are And if difficulties fall in our path way, we shall encounter them quietly, and carry our own burdena without drawing upon the sympathies of our pa-

A Card from Architects.
It is certainly most gratifying to us to be able to present the following, signed as it is by so many leading and prominent architects in this city. will can ady nothing to its force by comment, and
that each signature was freely and will only say that each signature was freely and cheerfuly given, accompanied with expressions of journal. And having secured the soccess of this so many prominent gentlemen in the pros some of whom have demonstrated their more than ordinary abilities in the erection of finest and most costly structures in this State, both private and public, and all of them enjoying an unimpeachable reputation as qualified architects, will be an incentive to us to put forth every effort to render this journal not only worthy of their conour many our many kind readery generally
Card.-Believing that a well and ably conducted journal, devoted to Architectural, Mechanical subjecte ${ }^{\text {and }}$, and other kindred matters and subjecta, is a necessity in this city, and judging Irom what has appeared in the QUARTERLY ARCH Burnham during t, pubished by Messre. Wolfe tion plates and reading contents, we are led to tha belief that the California Architect and Bumd ing Review, proposed to be published by the San Francisco Architectural Publishing Company from and after January, 1880 , will be worthy of general support and encouragoment, and that it will rupply
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Society of Architects.










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THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.


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THE CALIFORNIA ARCHITECT AND BUILDING REVIEW:

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THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.


THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.


THE CALIFORNIA ARCHITECT AND BUILDING REVIEW


THE CALIFORNIA ARCHITECT AND BUILDING REVIEW




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#### Abstract

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THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.
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THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.

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The California Architect The Theme of conversation and

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THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.

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|  | whom he has collected money for this journal, who were thoughtlese anough to hand him the amoun |
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|  | of twelve months' subscription, without takingany reeeipt. The receipts handed to us are all |
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THE CALIFORNIA ARCHITECT AND BUILDING REVIEW

|  yearr. of age, five feet nine ine inches to thirty-fou inches high noe feet 1 inches high, nose of the Roman type; naturall inclined to light complexion, but sometimes flushe incined by the use of light comp fiexion, but sometimes flushe free talker; great boaster, an in January wore high-crowned hat and a shabby genteel suit of ciothes. That he is a bold and art ful swindler, there can be no doubt. He stopped at the Arion House, Page street, for a week or at prior to the 24 th of of February. We Phave sworn out out a warrant for his arrest; ; but vagabonds of hi stamp, who make dieguises and deceptive tricks study, sometimes elude arrest. We, however, warn and caution all parties against the above-described villain. <br> Questions and Queries |  |  |
| :---: | :---: | :---: |
| Questions and Queries. |  |  |
| We may not be able to answer satisfactorily every question that may be propounded, but will do so tothe beest-of our abilities. We hope therefore the those who have unsolved, doubtful, or disputed |  |  |
|  | reat majority |  |
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| The more learned and intel |  | Sec. 2. No member over six mont ths in arrears |
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| than would be possible with ourrelvee. But there |  | Soc. 3. Members over twelve months in arrears |
| are many $\begin{aligned} & \text { cellent ideas, who feel incompetent to reduce them }\end{aligned}$ to writing for publication. To such we say, give ters not hows crude, and if a little remodeling is reauired to render the production readable and sat isfactory, we will assist you to the extent of our abilities. |  | being bulloted for as at first, and upoon the paymentof ail buek dues. |
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|  | Society of Aronitects. | tion), and the new officers to be installed at the first meeting in January. <br> Sec. 5. The President shall preside at all the |
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|  | We again refer to this subjeet, and as there are but few oopies of the Costijution |  |
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|  |  |  |
| The French Metre, |  | their dutiee are properly diseharged I In ovoting, other than by ballot, the President shall have the |
| The French metre is intended to be the one ten- millionth part of the distance from either pole of the earth to the equator; but anter it had been introduced into use, errors were discovered in the tance; 80 that the French metre, like the British By the British standarat, the leng th of of the menetre <br>  <br>  yard, foot, and inchese being about, one part in 12230 shorter than in the United States. which is equal to 3.677 inchies in a mile; or 1.14 ineh in 100 |  |  |
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|  |  | Ser. 8 . The Recording Seeretary sibill keept the |
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| A ageas of typhoid fever in Springfield, Mase., ischarged to the bad zanitary arrangements of the school-house. Water closests ars in the basement ofthe building with school-room o over them. The steam heat tends to drive the foul and fever-breed. | ARTture I. Name and Object.-Section 1. This Society bhall be known by the name of "THE CALLFornis Inss trutro of Akchritrcis.' <br>  | ant |
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|  |  | Sec. the Reeording Seeretary, keep a just and ac-from the curate acoount thereof, and pay the same out onlyupon an order signed by the President and connter- |
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 Posed amendm
rogen lar meeting,
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 Unfinished Busine
New
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ture








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office; but if work is exeuted at $a$ considerable or
inconvenient

 tions for site, arrang gementst respecting party wails
nor servicee incidental to arrangements consequent


THE CALIFORNIA ARCHITECT AND BUILDING REVIEW





FLOOR PLANS.




tanas for woo




Causes of il-Heaith among, Women.





号。Architectural Design.



Von to Art Edacation, under the patronemen
Excellency the Goiv..General and H. $\mathrm{H} . \mathrm{H}$. the


Proirssorx Note. - In the absence of fraud



THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.

Lead plipge tor water Servico.




























The Durablity of Timber.








##  Calififriin product of what in $1879,22,400,000$ centale

 Wheat and four exports in 1879, 12,074,977 cen. Whatand Aatr112,000, too centales. Barley erop of Calitornia in $1879,6,000,000$ cen-
als






 Sinining toock salees, 1879, (San Francieco Barara)
 Lumber imports at this port in 1879; 225,000,000


 Qunucksilver product in Califomis in 1879, 73,500
anke
 Banking apitial of the State, 8175,000,000.

Mercantile Law.















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Fined for Profaneness.


The Great Water Question.













##  

## The C゚alifornia sorchitert

BUILDING REVIEW.
SAN PRANCISCO ARCHITECTURAL PUBLISHING CO
JAMES E. WOLFE, Editor and Manager.



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A Card from Architects.
 Scientific, and other kindred matters and subjeet
is aneessity in this city, and judging from what












THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.


THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.






FLOOR PLANS-ONE-STORY COTTAGE.



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| ing Bulletin of $\triangle$ pril 3 rd , has been a subject of com- |  |  |
| ment and criticism among architects and buiderssince their appearance. A purpose on the part of so influential a journal as the Bulletin, to produce a series |  |  |
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| of plans for buildings suited to the wants and pocketsof persons of linited $m$ means, is certainl commend- |  |  |
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| able, and we congratulate our neighbors upon having secured the services of an artist aund architect or such tleman engaged by them. |  |  |
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| We do not tquestion the motives nor deny the right |  |  |
| of the Bulletin nor any other paper or journal to pro- |  |  |
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| but we do object to volunteer statements or intima not sustained by facts, or which are derived from |  |  |
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| sonal-considerations-calculated to-create-wrong im- |  |  |
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| pressions and lead to erroneous conclusions. We are led to these remarks by what appears in connection |  |  |
| with the Bulletin's "first of a-setects, as a rule, dis |  |  |
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| less than $\$ 2,000$." If this were true, it would illus- |  |  |
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| motives of extreme selfishness in seeking to dissuade from the lesser and advise the greater, for the purpose |  |  |
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| and with theintent of securing increased compensa tion and profits. Every act of mankind, "as a rule," |  |  |
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| even tho publishing of a newspaper, and furnishing |  |  |
| by a degree of teelfishness, someti...c.e.tight and proper |  |  |
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| $\begin{aligned} & \text { but we do not admit that this common and universal } \\ & \text { disposition is prominent among architects in any } \\ & \text { speciafdegree. Speaking intelligently and knowingly, } \end{aligned}$ |  |  |
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| speciartegree. Speakiilg inteliligently and knowingly, we deny that any such "rute" is in common practice in the profession- and if not the statement should not |  |  |
| in the profession, and if not, $h$ he statement should notbave been made by orin inteligent contemporary.When clients desire plans, it is natural and proper |  |  |
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| that the architect consulted should suggest and recom mend such improvements and additional investment |  |  |
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| as may to him appear advisable, and in failing to do so he would neglect a right and proper duty to the party desiring his services. But we question whether |  |  |
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| party desiring his services. . Bit we question whiether |  |  |
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| courage the drawing of plans for buidings of any de- |  |  |
| speaking advisedly and from experience, architeets iu |  |  |
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| and by moderation of charges for plans, encourage |  |  |
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| and drawings gratuitously to parties in humble circumstances; and almost every gentleman in the pro- |  |  |
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| fession-can-relate instances where they have furnished plans and specifications at less expense to owners |  |  |
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| plagiarism-if the term properly applies-is common |  |  |
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| in this eity. That after an arechiteet has puzzled his |  |  |
| studies, worked out and perfected peculiarly wellarranged and neat or beautiful plans and designs for a |  |  |
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| building of any character, there is generally some one |  |  |
| ception of fairness as to copy and appropriate to their own use, without so much as saying "by your leave,sir," plans which may have cost their author a large |  |  |
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| fully belongs to him. This system of "plan stealing" |  |  |
| And to their shame be it said that owners possessed iderable means and resources, as well as thos who have "just enough to build withr," are guilty of |  |  |
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| them, to others; the result of which is to "beat" architects, and obtain the benefit of their experiences and knowledge with as 1 litle compensation to them as |  |  |
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| possible. <br> But for present purposes, further reference to the |  |  |
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| profession is unnecessary. There is a strong defens for it, as we shall endeavor to make appear, shouldoccasion require. But as the Bulletin has furnished |  |  |
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HE CALIFORNIA ARCHITECT AND BUILDING REVIEW.


40
THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.


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## $\left.\begin{array}{c}\text { youvirk } \\ \text { number i. }\end{array}\right\}$

SAN FRANCISCO, MAY 1, 1880.

## $\left\{\begin{array}{c}\$ 1.50 \text { per Annum, in Advanoe } \\ \text { Single Copies, } 15 \text { Cents. }\end{array}\right.$

The California Sorhitect
BUILDING REVIEW
SAN FRANCISCO ARCHITECTURAL PUBLISHING $C O$
JAMES E. WOLFE, Editor and Manager
240 Mostromenry SRREET.
Sent to any part of the © U. S., postage paid, at $s 1$.
per annul, with extra cost of postage when

Entered at th a Post Office at san F



Future Prospects. an encouraging an pets.
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$\frac{\text { Art in a Cottage. }}{\text { The mission of art an to tho cottage in in one of ex }}$


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There is a woman in Wisconsin who has beer
harried fifty -eight years, and who has never missal



Those Daugerous Scientists.













Defective Coimneys and Flues. Many millions of dolliars' worth of property has
in timo been reained onhes, and thounandot hu-
Inan lives sacrificed by fires orig inating from de-
















 Chimneys are sometimee poorly built, bēause
heir erection is undertaken at $\overline{\text { and }}$ low figure, and the

##  doio. In food comm foctive tue anes.


 joct. wo watill postpone fart her diseussion of the surb-
of antion. of aetion.
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Wite you will promise to consider it from

 Wifo. The last word you have ustered is the one
of all others, Ihave desired to hear-do. That in of all others, I have desired to hear-do. That
exercise by you, and all will be well.
$\stackrel{\leftrightarrow}{\text { Where }}$ the Cold Waves Come From









The Earth's Day'Increasing,




 the arth's surface. The tides act like at urake,
tond
tion.

> Chemp

CANVASsens.--Reliable, industrious, and compe-
tent parties to convanas for this journal wanted in tent parties st canvass for this journal wanted in
every oits ond town on this coast. Good induce-
ments offered.

## And the Good Wife sald,

$\qquad$








 my nervous condition. My nerves are all right,
but if oun want otrong then them, romide me
now, that you will at once take this matter in hand




 of prospenity leane you stranded upon the sbores of
nosines andersity
Hubsand it is all true, but at the same time
 Wife. That you have judgment, determination
and energy autfoient to acomplist the task, it you





THE CALIFORNIA :ARCHITECT AND BUILDING REVIEW
















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|  | supposed there was none fit for brick-ma <br> 'Hard on Contractors.' |
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| in this city was subjected to un examination by $a$ |  |
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|  | and insists that his plans-and specifications shall be followed and earried out, offense is taken, and |
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|  | the architect must either sacrifice the owner's in sometimés amounting to positiye and bitter enmity |
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|  | ive and bitter enmity |
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|  | reference to architects, and the arehitect perse |
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|  | This condition of things does not oeeur with good and true men who understand their businessaud expect always to fulfill the obligations assumed by them; but with the elass first mentioned, whofortify themselves behind the bulwark of |
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|  | as fur as the possibiity of contradiction is oconcerrued. A drehiteets eannot follow misehievonily |
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|  | minded men to discover their aets and sayings, |
|  | may beir instataneesin in whieh some seseverity may hhavemeen practiced, but such are not the rule, but thebe |
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|  | ing at conclusions-sometimes from estimating bysome cobe orr square rule, which gives an ulieer-- |
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|  | tain result; and sometimes from ascertaining the |
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|  | different classes of buildings with any degree ofcertainty. But it matters not what may lead toerror in a contractor's estimate, the arehitect is |
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|  | error in a contracim out, if not-altogether, still to |
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|  | of their own mistakes. But when plans and spec- ifications are full and complete, it is unjust toward |
|  | the arohitect, that he should be denounced as a"hard man,", simply beause he will not pernitevasions and derarture from the written and pre- |
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|  | mystery about their work, and appear to imagine |
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|  | lialy sensitive about taking kriown what they |
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|  | though the world stood agape, ready to wonder and |
|  | Perpetual motion mongers are justified in keeping |
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THE CALIFORNIA ARCHITECT AND BUILDING REVIEW. Commendations





For description, see "Our Illustration Plates," page 49.





THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.


|  |  | thereon. The rents are about $\$ 3000$ per month The building is worth about $\$ 110,000$$\qquad$ |
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|  | aceass to eellar can alao be be made under rear stair of |  |
|  |  | Vert the Cosmopolitan Hotel building into etores, all of which are engaged by leading firms in the |
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|  |  | lines. The facts presented in this connection indi-cate that there aro lively times in prospeet for the |
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| whereby in enas or ire no ocalion to fear the |  | meohanies of this city. The prospects atear will not only prevent the further departure of building |
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|  |  | employment. The real estate it iterest certaniwly pro-sents chering condition of things for the future.] |
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|  |  | on Market street to the extent of $\$ 245,000$. These |
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|  |  | de to San Franeiseo real eetate. Af |
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| being taken that there is a mpace of about half an |  |  |
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|  |  | north-oast of second, $50 x 155$ in size, to Stevenson ing cost $\$ 47,000$ some five years ago ; it rents for |
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| A valuable |  |  |
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|  |  | rell, |
|  |  | ment of this property will eost, we suppose. $8330,-$ Ooo. We hope that there is some truth this time |
|  |  | In this oft-repeated story of Mr. Phelan's intention |
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|  |  | cen years. We shall be pleased to know that Mr. |
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|  |  | his sworn statement, was not the possessor of a dol-lar in cash, but had an overdrawn-bank account,has so speedily recovered from his embarrassments |
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|  |  | A solid three-story and basement brick building is about to be erected on the lot north side Market,between Davis and Drumm, adjoining Gen. Wil- |
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|  | Real Estate Mayket. | liams' new block of buildings there. The lut has a frontage of 54 feet, by an average depth of 110 |
|  |  |  |
| a home hap | We clip the following from Magee's: Real Estate Circular of May 18t, showing transactions for April, 1880 |  |
| $r$-proof Mortice Door-Bolts. | A material improvement is noticeable in real estate, especially in the demand for business prop- erty, This demand does not extend beyond prop- | $\$ 25,000$ net. The daily papers incorrectly reported the price to be $\$ 27,000$; there is an elegant new |
|  | erty. This demand does not extend beyond property that is central and paying well; all vacan | p- mansion on the lot, which cost $\$ 16,000$; the loca- <br> it tion is yery commanding, and is opposite Lafayette |
|  |  | , |
|  |  |  |
|  |  | has been sold for $\$ 11,250$; new houses are about to be erected on it. |
|  |  |  |
|  |  | The lot south-east line of Bryant, 125 feet north ast of Second, 150 feet front by 160 feet in depth, back to Frederick street in rear, has been sold for he storane of Culifory solnes is to be erected on the lot, at a cost of $\$ 25,000$ or $\$ 30,000$ The one-story brick store, running through, and |
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|  |  road has, given n great impotus to lands out alon |  |
|  |  | The one-story brick store, running through, and lot, $25 \times 1192$, on south side of Clay, through to Com mercial, has been sold for $\$ 9,100$. |
|  |  | The 50 -vara, north-west corner of Jackson and Webster, which was sold for $\$ 6,600$ about twomonths ago, has been resold, we are told, for $\$ 8,000$. The buyer pays no cash down, but is to build houses on the lot, to be sold on the installment plan The following property has been sold for about \$10,000; 318 feerkn nor sidet wast side of Cla ston also, 314 feet on south side of Carl, 399 f feet on |
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50
THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.





Building Intelligence.



Market Report.





 - oakland.




 One two-st
Owner, Mrs.





 THE VERY LATRST INVENTION


TRESSLER'S IMPROVED
Cooking and Parlor Martle Grates



Refuso Rough,
Cummon Rough



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 Surfaee
Surfice,
Sut
In


." short, 8 to 10 feet......

No. feet and oiver
7 too 11 feet
under 7 feet....
Pickets, rough, rosquare.

 ing reduction.
10 to 66 pennies, are quoted at.
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Those Cheap Dwellings.


















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now, ourer the cost of tuob a building, allowing
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 motive of jealousy, It it small in any one, unde
anin cirummstanes, and to honoralo architete an
jounnalists, it is simply onotemptibe. We hav






#### Abstract

           this oharacter, hanse, wished that their lote w nuninumbered. Rights of Employers and Employees,       enthe suggestions commundianted by by the person if the employed eontity  real invention or diseovery belongs to the pereon who made th sungzesion. The dootrine held by the       been made in the shop of the employer, with tools, and during time belonging to him.       

Our No. 5.             nd we hope that seming doparture from this rul will lot tom anoribed to any unfair disposition or in- ent We cortainty  onthy number, in addition to the four quarterl)      pending inposongress in reelation to to Publio Healti, ho forlowing action was taken Ret     orred to is considered specially important to $t$. raritime interests of South Atlantic and Gulf poit f the $U$ nite        Appended Documents and the Reports of the Ye ow ever Count demio of 1878.   


THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.
ery Great Mistakes.


Benefits of Good Tools.







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THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.


 Wial economy and welfare.



New Ship Can


 All know the lead pencil, yet few understand how











One-story Factory Bullding.
















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| wers of silence. |  | ar Ilustration Plates. |
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| Ve of dipposing of their |  |  |
| ead bodires of their co-reliyionits to be de. | of the niembers of this united and unique com- |  |
|  | munity mingle together in death. Of course, the |  |
| cover the dead body of P Purrees before it |  |  |
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| be interesting. | sometimes bo a horrid und revolting giyht inside |  |
| of the prophet Zorosster, who flou |  | a one-story cottage, shown in connection with said |
| Ion two thousnd yeners before Christ. | ering of Paint and Varnish |  |
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| g, nd the tonch of an ordinary mortal is |  | neat, and not expensive for a good honse. The |
| suppaed to con taminate it. Immediately a ater the | may be that this opinion has been forestalled by others; but as we have never seen the points laid | cost of a well-built building, with elevation B, will vary from \$2,000 and upward. |
| charge of by two nnasgasalarat (a body of men who |  |  |
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| itise cleaned and olothed in white unsullied garmente, |  | Strange Story of S |
|  | nish. This evaporation is is caused by heat, /and it is is seldom, if ever, a blister will rise upon a varnished | A curious letter is published in the Shefficld Daily |
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| down on their knees, with the face touching the |  |  |
|  | Coach Painter. |  |
|  |  | American steel manufaturers, who saw, uuof- |
|  |  | of work in the steel furnaces," Mr. Clifford's |
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|  | indter to arbitration, but the employers decline. |  |
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| purifuatory oeremiony. Directly the nassab | were white, and 60 culured. The total death-rate |  |
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ELEvation.a.


Cryeat Bulldings and Great Builders.
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Floor Plan. for Elerations. A. Wh.

58
THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.









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THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.




THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.

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| lowest poassiole |  |  |
|  |  | serve as conduators for all upper stories, and the |
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| further proposition must bo admittod, that oon- |  |  |
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| number of cases. We are willing to admit that some of the contractors operating in this oity have made finnacial successes of their building operations, |  |  |
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| made financial successes of their building operations, but it is questionable whether a paraliel "an be |  |  |
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| opportunities " to make money in the building business have been so great, or so recklesply thrownaway as they have been by contractors in San |  |  |
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| Francisco during the thirty-odd years of its existence as a city. Thousands of buildings of every |  |  |
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| limits of the "Metropolis of the Pacific,", costing many millions of dollars, and from this vast outlaybut few builders have realized any considerable amount of coin, as percentage of earnings and profits |  |  |
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| failures have occurred, involving a large amount of losses in the aggregate. Competition, from the |  |  |
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| earliest days of the city's history, has been neither wise nor profitable, as a rule, so far as accumulated results to operators are concerned, only a few haverate living; and it is difficult to find more than a very few, even among the more successful, who admit |  |  |
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| Hilding operations. The fact is beyond sucoesesful contradiction that |  |  |
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| the contract prices at which many hundreds, if not thousands, of buildings ereoted in San Francisco |  |  |
| have been let, have been for less sums than their atual cost and value, and in nearly; if not quite as |  |  |
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| many cases, pro rata settlements have followed, mill-men, workmen and others. |  |  |
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| Generally, in such cases, owners have reaped the |  |  |
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| ppon themselves |  |  |
| onal annoyances, but the expenditure of an amount money to make settlement, much greater than the prospective saving at the time of entering into con- |  |  |
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| night be related of those who , were prominent as |  |  |
| been the result of specially favorable ciroumstances |  |  |
| younger contractors, of from ten to fifteen years experience, have done well, and laid for themselves a | Help U |  |
| oundation upon which, by careful handling, they nay reasonably expeot to accumulate an early com- |  |  |
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| of thousands of dollars have e, apsed through theis |  |  |
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| ayments, unqualified failures and "runaway" |  |  |
| that there is a large deficit standing against this lass of contractors. And we do not hesitate to |  |  |
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| ery large number of a certain class of buildings in his city, will not average more than 90 per cent. of |  |  |
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| their aotual cost and value at the time of thei erection. |  |  |
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THE CALIFORNIA ARCHITECT AND BUILDING REVIEW








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Death of Stephen H. Willia
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fanother worthy and good man, who in his life-





| tal Consequences of Imperfoot Sewera |  |  |
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| ted in the temporary closing of th |  | Healthful Brick Reatdonces-Hollow |
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| The Temperature of the Sun. |  | Say-so's. |
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| ngton, D. C., June |  |  |
| To the Editor of the Scieritific American:-In your |  |  |
| s80, there is an attempt to an | bewitohing little blaok-eyed beauty one eaidd to |  |
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| himelff, he obtains a similar result. | a young lady stepped on his foot while dancing, and |  |
| ther way, Mr. Editor, is unique! Look at it |  |  |
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| diameter of the sun? $\mathrm{H}_{0}$ evidently is not aware | or |  |
| lated froam center toe cent er. . | Succeessful Treatment of Tetanu |  |
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| the millions" than with what W. E.' Sawyer has observed in electric temperatures. T. Robinson, |  |  |
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| Water-Closets. | es at Pompeil. |  |
| ndent writes, asking whether it is pos. | An almost perfect house has been lately disen- |  |
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68.

THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.



Hiknware AND NAILs.-We note the follow-

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 Building Intelligence.
Operations in building improvements have been
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TRESSLER'S IMPROVED Cooking and Parlor Mantle Grates


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## BUILDING REVIEW.

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SAN PRANCISCO ARCAITECTURAL PUBLLSBiING CO
JAMES E. WOLFE, Editor and Managor, 240 Momrooxrax 8razrt.
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Amerioan Iron and Iron Ore.


















The Power of Human Thought









 powers, and their mysterias unfolded; and, passing
frome created and material conditions, the thoughts
of mon






 To which the pooteese beautifully adds:



 "It comess in the midanight doep."




Now and Then.

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> A Common Fact.







The Prevention of Virulent Difer One at - Dint Diroases























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Dr. Sy dney Ringer allo the attention of the pro



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Expansion of Clase






THE CALIFORNIA ARCHITECT AND BUILDING REVIEW






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Wholly Unnecessary.
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THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.


THE GALFORNIA ARCHITTECT AND BUILDING REVIEW

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|  | Omafi, Neb., July $29 \mathrm{th}, 1880$. <br> Edrioin Architecr and Buliding Review: I observe in your July issue, that you advise I observe in your July issue, that you advise the neessity of hollow walls in brick buildinge, und also state the fact that such walls oan be satiss factorily constructed employed. As this opens a question of importance low walls, which I have used of constructing holing the past twelve years, and which I find gives thorongh satisfaetion | The Mechanics' Institute Fair. <br> The fifteenth Industrial |
| coat Tiland, was th |  | The fifteenth Industrial Exhibition was inaugu |
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| should the company suceeed in seeiring the |  |  |
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|  |  | and all entertaining personal views and opinions in their earlier, localized conditions. This fact arguee well for the intelligence, good judgment, and com- |
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|  |  | mon sense of those who tion through the years which have succeeded it |
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|  |  | first organization. While many other societies and associations, organized for noble and worthy pur-poses, both religious and secular, have surrendered to the ever changing conditions of things in this city, the Mechanics' Institute remains unimpaired in its usefulness and success; and from present ap pearances and prospects, its future is full of prom |
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|  |  | will, in a few years, at farthest, pass from the cond trol of the Institute. When this occurs, we hopeto see a permanent building erected, which shall |
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|  |  | remain during the years of present generations, an established center of brilliant results. |
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|  |  | a subatantial appreciation of the efforts madiest tofurnish them a pleasint place of resort, with thin of practical interest and instruction on every hand.ind |
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|  |  | Spreading and Extending. |
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|  |  | The systems of railroads which are now in course of construction, and contemplated, linking Califor |
|  |  | Eastern and Southern States, are matters of very |
|  | One by One they Disappear. | present the possible opportunities for good or evil. With San Francisco as the grand center, their beni- |
|  |  | ficial effects upon the businases interetetsir of the "Metropolis of the Pacific" will be large; but an |
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|  |  | the Missisi ippi Valley in four, andi, if fast trains to put on, in three days, the de |
|  |  | grapes should be practically unlimited. When it |
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|  |  | marketed at seasons when they will encounter no competition whatever, they cannot fail to be eagerly sought after. |
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|  |  | Source of Muscular Power. - The theory has been adopted by many physiologists of. late years that the muscular system of a fully developed man, |
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| artistic feeling. No country in the world |  |  |
|  |  | transforming it into muscle. Dr. Flint, however, in a recent work, exumines this theory, and gives |
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|  |  | the results of a series of observations by himself and ness. After the most careful teets practicable, his |
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|  |  | conclusions are in opposition to the theory of direct food con version, and lead bim to adhere to |
|  |  | the older assumption of muscular waste and repair, <br> the muscles being their own source of power. |
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An A wakening in the Lumber Interest.

We note with pleanurr that the better time
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THE CALIFORNIA ARCHITECT AND BUILDING REVIEW

 Building Intelligence.

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tractor, MrI. Pryern
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Alterationsoforouse on Nineteenth near Mission
Contrator, Wi. Phunz. Cost, \$550.


##   Herman ; arehiteet, Gyilfuss; ownerta, Hofriman Kinds- mand Improvements and alterations of a two-Atory                     One two-story frame on Sanchez, between 1 and and tothtory and basement, on 17th had Douglase Ono-story yand basement, on Hancook, botween       <br>   Theme imime     <br>      THR VERY LATEST INTENTION improvement in G R ATES. <br> TRESSLER'S IMPROVED Cqoking and Parior Mantel Grates Are the very Best yet brought out. A. HAN  <br>   <br> 



## BUILDING REVIEW.

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## THE STEEL SQUARE.

Its History and Application to Builaings













"Everything Fair in Love and War."


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and original matter, but it was not.







> Cheap Labor.

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## A Nimble Thing.





















The Future Lumber Supply.










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THE CALIFORNIA ARCHITECT AND BUILDING REVIEW


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An Auger which Bores Square Holes.












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Our Illustrations.
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THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.




The California surchitect GALIFORNIA ARCHIITECT -nid BUIIDING REVIRW

## BUILDING REVIEW

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as a monthly publication, will end with its
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THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.







The Sewerage of San Francisoco.
















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Durability of Tin Roots.
















THE CALIFORNA-ARCHITECT AND BUILDING REVIEW.










THE CALIFORNA ARCHYTECT AND BULDING REVIEWW - 99

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| appears to us that every intelligent person must | (elerator of th | 7 teel 11 and over -" ${ }^{27}$ |
|  |  | Halfineh Surface ${ }^{\text {under } 7 \text { 7 }}$ |
| - ${ }^{\text {anilding }}$ covering ho more ground than the plans | ${ }^{\text {a }}$ | Pickets, fancy, rough, pointed .......... "\% ${ }^{20}$ |
|  | Th | Picketer, rough, , square. . |
| design, manufaotured by S. Cooo of Florence. |  |  |
| B. E. Henriksen's Safety Clutch. | San Francisco Stock Exochango | Sugnr Pi |
| The annexed cut is an illustration of $B . E$. Henriksen's Patent Automatic Safety Clutch for Elevators: |  | ${ }_{\text {R. }}^{\text {R. W. }}$ |
|  | $J$ Oerf \& ${ }^{\text {co}}$ | Hardware and Natus, - Wo noto tho foll |
|  |  | 10 to 60 po |
|  shaft teoured to the frame of the cage and support-ing two toothee cams or dogs. $A$ corrugatod strip of wood or oleat is applied to one eido of each of the guide posts of the elevator, in such a mannerthat the rollers on the trip levers will be oaused to rotate along their corrugsted face. At the or dinary rate of speed theese rollers pass over the pro- |  |  |
|  |  | ${ }^{5} 5$ and 4 " " 4 and 5 pennies, brad head |
|  |  | 4 and ${ }_{6}$ pennies, brad head |
|  |  |  |
|  | Pioneer. Woolen Mills, .......... 115 Battery street. 1. Mr. Heniksen recived the Sinver MEDAL awarded by the Mechanics Institute for the best Safety |  |
|  |  |  |
|  | Market Reports. |  |
|  |  | Reoeipts |
|  |  |  |
|  | the inereased consumption of glase, have almost denuded the market of all mall sizes, as well as | 1,558 bundle |
|  | dwelliny-honse size, double thick. Thene are two vesels on the way, one being out 123 days and the | Total ree |
|  | other 128 days, with a supply on board, but not enough for the market. One of our largest firms in place of receiving consignments as per orders of |  |
|  |  | Wood, eds............................ ${ }^{\text {Le, }}$ (18,611 |
|  | in place of receiving consignments as per orders of |  |
| 10 |  | Cedar, log |
|  |  | Rosewoo |
|  | Yurk firms are short of this stock on hand as well as our own. We report glass very firm, with an increase of price since our last |  |
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|  |  |  |
|  | (e) | ${ }^{\text {staves }}$ bilis.................................. ${ }_{1,485}^{1,499}$ |
|  |  | Railroad Ties ....................... ${ }^{\text {ens,129 }}$ |
|  | per thousaud. Nails have declined 25 cents a kemspen the market isvery firm. The stock of 8 s and 128 but the market isvery firm. The stock of 88 and 12 s , hardware are in active demind, but the prices remain the same as our last. The total imports of nails sincehalf kegs. |  |
|  |  | Sugar Pine, fti....................... $2,190,000$ |
|  |  | Spars ......................... ${ }_{\text {d400 }}{ }^{90}$ |
|  |  |  |
|  | Common Rough, up to 40 feet, per M feet ... $\$ 2000$ $\begin{array}{lllll}40 \text { to } 50 & 6 & \cdots & \ldots . & 2100 \\ 50 \text { to } 60 & \cdots & 6 & \ldots . & 2200\end{array}$ <br> 60 to 70 | Telegraph Poile................... 1,508 |
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|  |  | (taciotts during tho past week have been heavier |
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| Mr. Henriksen, at the liast Meehanies . Institute | No. 1 Flooriug, 4 inches and under, and it <br> $\leq 6$ Flooring...............per M feet.... 3000 | during the week has been an advance of 25 cent in Shingles. |
| to demonstrate the particular working of his in vention. This elevator contained a load of about 600 or 700 pounds, the average load of ordinary | Rouph Comar for fooring, $\$ 1$ leses than above. rates, per M feet. | Exports of Shooks since our last: Value |
|  | Second quality Flooring and Stepping, per M feet. | Oot 6..Newbern, Mexico, 78 pkgs....... 854 Value. |
| elevators. The cage was run up and down at the usual rate of speed; then a brake was opened and |  |  |
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| the cage permitted to fall violently as if the eable | Deck Plank, rough phe........ "/ .... 300000 |  |
| caused the clutches to perform their duty by in stantly stopping the cago. These e tests wero madefrom four to twelte. times every night for four |  | of Bombay, Liverpooi. 16,16000 |
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Builaing Intelligence.





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he former, but Okkiand and several of the interie



 ins ") for their dinners. siver pux










 Jones and Leavenworth.
contractor, $\begin{gathered}\text { Owner } \\ \text { Ehrman. } \\ \text { Cost, } \\ \$ 1,400 \text {. }\end{gathered}$ Artfort;




##  <br> VoLUME NUMBER I. I. <br> SAN FRANCISCO, NOVEMBER, 1880.

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BUILDING REVIEW
1500
JAMES E. WOLFE, Editor and Manager,
240 Moxtoonery Smazer.
GEO. H. WOLFE, Business Manager:

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 Building Intelligence.










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 $\underset{\substack{\text { nishes } \\ 88,500 \\ \text { materials. }}}{\substack{\text { Labbor by contract. }}}$






 Two-story and basement frame builaiug for
Wagon and backemith hhop, on Post street between
Jones and Leavenworth.
owner





THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.


## 




BUILDING REVIEW
san Prancisco architectural publishing co
JAMES E. WOLFE, Editor and Manager, ${ }^{240}$ Montronsry Strebrr.
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The Future of this Journal.












 eegularly nuthorized and empowered Board.
Architects are orten "Beaten, and Plans
Seoured Without Cost. As the reppeeentative journal of the profersion on















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ment of all the advantages contuined in things

THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.

|  |  | Correct Plans a Necessity |
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|  |  | bad workmanshipissuch, that consummate botchery |
|  |  | awners, by-saving them from mistaken engagements with cheap inferior parties, even if it enforces the payment of fair and legitimater sommissions |
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|  |  | Every architect in the country is indirectly in- |
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| preen stinging it out a |  | fesedy in harmony with the doocrines and tenets |
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|  |  | of their respentive denominations, have " hardened the hearts of thousand of sinners," "who, improperly we admit, denounce all teachers of divine things we admit, denounce all teachers of divine thinge as hypocrites and demagogues. And the same rule |
|  |  | holds good in reference to professional men of all classes. |
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| wer-gas-Small-pox. |  | worker for daily wages may be diseharged at an moment, with no greater loss to the paying party, |
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| a |  | than the amount of wayes paid for insufficient ser- |
|  |  | ouner discoverg the error which may have been, miade, large expenditures may have been incourred, |
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|  |  | Henee the folly of owners intrusting their |
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|  |  | farther than personal friendship, or the artful embellishments of sophistry-a qualification at the by his wits and showy pretenses, than by his sub- |
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|  |  | stantial qualifications. |
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|  |  | Belgran Sand for Making Giass. - It has been suggested that German vessels, or rather vessels |
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|  |  | bring Belgian sand-the best in the world for glass making-as ballast, and not only make a little on |
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104
THE CALIFORNIA ARCHITECT AND BUILDING REVIEW

How Architects are Misused.







The Glory of the Architect. Robert Burdette, of the Burlingtoct. Hawkike,
ays: I have offen wonderea why the








Mechanics as Writers.














 The Antiquity of Labor.
Whatever of prehistoric obscurity and mystery
may surround "the beginning", of eertain nations,

 means which would provide them a a overing for
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thakedness. Consequently, the frist labor per formed by human hands was in the Garden of Eden
by the prognenitror of the fanily of mankind, in
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Sasi Chain \& Fixtures.
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188 .
Price,



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Constipation.


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- verging on paralysyis. - Hall's yourrnal of Health.






Book Notices and New Publications.







THE CALIFORNFA-ARCTITECT AND BUILDING REVIEW



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SAN Prancisco arhirieetural publishine co.
JAMES E. WOLFE, Editor and Manager, 240 Moxtroonrny P Ruser.
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A New House Blown Down by the winds．
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| roofs；and if not duly painted at proper interval they give out and become worthless，As before r maiked in this journal，if tin roofs are painted |  |  |
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| constituting the roor．In the Eastern states，cop－per and sheet－lead are used for－roof－gutters；but onthis coast，tin is the universal metal－and if in－serted，cared for，and treated as wo have suggested， |  |  |
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## PROSPECTUS FOR 1881.

 Its second volume will commence with its January number, 1881, and including the Quarterly for 1879 , its third volume
Were it reasonably possible to place the subscription done. But the excessive cosst of publishing a journal in San Francisco oves sum than The Tow Dollars per annum, it would have been
to adopt a prienced to adopt a lower standard of subscription rates. Numerous disadvantages and outlays have to be encountered in this fiesible operations which do not present themselves in other placess, and it requires and outlays have to be encountered in this field of
like results weater labor and expenditure to accoomplish Tceeptable. hearty approval whatever of indorsements receeived, both ath hame may have been exhom from abroad, give easy. acceptable. But whatever of excellence may have been exhibited during the yoar give assurance that past efforts have been
pledge is here made that the most earnest and persevering efforts will be cosed with forthis is sue, the
 The western coast of this sureatiority as far as as the Pacifice coast is comneerned. gold and silver minest its teeming fields of golden graver heretofore been fairly represented in many of its interests. Its wealth of
more of comparatively wonderful thing
truit and wines, enjoy world-wide repute, but there are thansands nore of comparatively wonderful things which have not received deserved attention. These in order will furnish material for
future attention in these colums. Till receive due attention and be fully illustrated. At present and herentofore difficulties have attended the production of illustrations, but as the mberrai, subscription support
Hill the best within the range of possibilities on this overcome, and in the near future arrangements will be perfected which will indinsure
which will of certainty insured be, to reach satisfactory excellence, measures will we adopted
 Athough hundreds of notices complimentary to its editorial management have been received from all parts of the country,
the engagenent of additional writers, of acknowledged abjility, will be a guarantee that its columns will contain a large amount of
instructive and interesting matter.

 The thirty years' residence of the editor nearly constantly in California, with some experience in Oregon, and two years in
Brititsh Columbia, will bea sifficient guarantee that all representations in reference to matters upon this coast will be fairly
and intelligently represented. and intelligently represented.
Communications from all parts of the country are greatly desired, and will be highly appreciated. The fullest information
possible will be cheerfully given to all parties seeking the same through this office.

EVERYBODY'S COLUMN.

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 San Joaquin Valley.
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We quote eargo rates : Pine-Rough, \$16 क्ष M $\mathbf{M t .}$; No. 1 Flooring and Stepping, $\$ 24.50$. RedwoodRough, $\$ 16$; Surfaced, $\$ 23$. Retail rates: : "PīneNo. 1 Flooring and Stepping, $\$ 30$; Rough, $\$ 20$. Redwood - Rough, $\$ 20$; Surfaced, $\$ 30$; No. 1 Redwood - Rough, $\$ 20$; Surfaced, $\$ 30$; Flooring, $\$ 27.50$; Tongued and Grooved Beaded, $\$ 27.50 ;$ Fancy Pickets, $\$ 20$; Grooved Beaded, $\$ 27.50 ;$ Fancy Pickets, $\$ 20$; Rough Pointed Pickets, $\$ 16 ;$ Ro
ets, $\$ 14$; Shingles, $\$ 2.25$ \$ ${ }^{\text {M }}$ M.

## Cement, Plaster, Lime, Etc.

Imports since our last: Per Alameda, 1,000 barrels Cement.
Total imports since January 1st
Cement, barrels.
53,505
6,880
63,280
Fire-bricks.
63,280
2,950
Plaster, barrels
Receipts of California-Lime since our last:- 2,840 barrels. Total since January 18t, 109,642 barrels. The Alameda brought 1,000 barrels of cement; the market is quiet.
We quote. Lastern Cement, Rosendale, \$2.25@ 2.50 ; nther $\$ 2.12 \frac{1}{2}$; Portland Cement, $\$ 4.50 @ 5.25$, as to quality and brands. Plaster-Eastorn, $\$ 3.25$ $@ 3.50$; do. Golden Gate, $\$ 2.75 @ 3.00$. Lime-Santa Cruz and Sacramento, \$-@1.50. Fire-bricks$35 @ 40$, jobbing at $\$ 40 @ 50$, as to brand. California.
Brick-Hard, $\$ 10 @ 12$; Soft, $\$ 7 @ 8$; Red, $\$ 9 @ 10$.

## Building Intelligence

Although the past month has been very quiet as far as the letting of contracts is conicerned, still,
 exeeed the report in our Nosember number. We could name several that would enable us to swell the list, but prefer to wait until our next issue, when we will be able to give full particulars. We know positively of one large building to be erected on one of our busy streets, where the piling contract has been let, and also the contract to supply the lumber-sone on the-ground will be removed as soon as poson the-ground will he removed as soon as pos-
sible. Mr. Crocker has also commenced the imsible. Mr. Crocker has also commenced the im-
provement of his property on Post street, between provement of his property on Post street, -between
Kearny and Dupont. The old buildings have been torn dowa, and grading commenced. It will be done partly by days' work. A full report will be found-in-our January-number. The report warehouse on Pine street opposite Union Block, for Mr. McCreery, seems to have been a little prema-ture.- The present lease does not expire until next March, and from what we can learn, no architect has prepared or is preparing plans for a building on the site mentioned. It being our last issue for the year 1880, we cannot but express our thanks to those who have helped us to make this department of our journal as interesting and to be depended upon as it has been during the past year. It would be invidious in us to mention names, and so we would take this method of announcing our warmest thanks to all those who have, during the year now closing, rendered us services in making the Building Intelligence a leading feature of this journal. We have perfected arrangements which will insure greater fullness in the future. Real estate agents in Alameda, Oakland, and Berkeley have promised us their eo-operation in enabling us to give a full report of the erection of buildings in their respect-
ive vicinities. We extend our sincere thanks to ive vicinities.
the architects of San Francisco. During the whole year, with but three exceptions, we have not met with a single rebuff, or been refused answers to our queries in regard to contracts. We do not wish to publish the names of those who refused to give us
information, hoping now that the new year is information, hoping now that the new year is
about to commence, and all doubts about the future about to commence, and all doubts about the future
of this journal have been set at rest, they will give of this jourual have been set at rest, they will give
us their hearty support, and enable us to point with us their hearty support, and enable us to point with
pride to the Califorinia Arcuitect and Buird ing Review as the leading exponent of the profession on the Pacific Coast
The prospects for building improvements are good, and much better than at any time during the past three years. But even under present conditions, mechanics generally, both in cities and country, are busy. There are a good number of buildings about to be commenced that will give employment to a great many men. Lumber is bringing
its value, and our mill owners are enabled to pay their hunds bettor wages than they did last year, thus giving the men a chance to lay away their savings, so that if we have another dull streak, they will have ready money to pay their way. Architects, Property Owners, Contractors, Mechan ics, and All. Wo wish you a Merry Christmas and a Happy New Year. Hoping to receive your fall and hearty support in the future, as we have in the and hearty support in the future, as we have in the past, wo now close our labors for the year, and have made the usually rough road of the first year's experience-in journalism particularly pleasant to experienoe-in journalism particularly pleasant to the editor of the Californta Architeci:

## san francisco

Four-story and basement brick building on Market street, at junction with Front. Owners, Hunt ington, Hopkins \& Co. ; architect, Wm. Patton contractor, Ewing. Total cost of
Two-story dwelling on west side of Steiner, botween Bush and Sutter. Owner, A. Sbarboro; tween Bush and Sutter. Owner, A. Sbarboro; architect, 'I. J. Welch;
J. Proll. Cost, $\$ 3,000$.
New building and additions to the Standard Shirt Factory on corner of Grove and Gough Shirt Faetory on corner of Grove and Gough
streets. Owners, Neustadter Bros. ; architect, P. streets. Owners, Neustadter Bros. ; architect, P.
R. Schmidt ; contractors, Waterbury \& Maxwell. R. Schmidt; contrac
Cost, about $\$ 11,000$.

Cost,-about $\$ 11,000$.
Addition and repai
Addition and repairs to building No. 421 Mission street, near First ; day's work. Cost, about
$\$ 1,500$. $\$ 1,500$.
Two-story and basement dwelling on Broad way, near Buchanan. Owner, O. Helmerick; architects, S. \& J. O. Newsom ; contractor, John Dougherty. Cust, $\$ 5,000$.
Two-story and basement dwelling on corner of Webster and Sacramento. Owner, C. Wilkins; architects, S. \& J. C. Newsom ; contractor, John Furness. Cost, $\$ 5,000$.
Two-story and basement dwelling on Geary street, between Webster and Fillmore. Owner, Geo. Law : architects, McDougall \& Son ; contractor, J. Furness. Cost, about $\$ 5,000$
Two-story and basement dwelling, including repairs to the rear house, on Howard street, between Eighteenth and Nineteenth. Owner, John Stewart; architect, W. P. Moore ; contractor, D. W. Ross. Cost, $\$ 3,300$.

Tweive houses, two-stoly, on Hoff avenue, between Sixteenth and Seventeenth streets. Owner, Carroll Cook; architects, Wright \& Sanders; contractor, Burpbee. Cost, $\$ 18,000$. (This was aceidentally omitted in our last issue.
Two-story dwelling with store, on S. W. corner Henry and Noe streets. Owner, T. George ; architect, H. Geilfuss; contractor, y F. Klatt. Cost, $\$ 2,700$.
Brick house on corner of Now Montgomery and Natoma streets, to contain a gasometer to supply Palace and Grand Hotels with gas. Owner, Wm. Sharon; architect, J. A. Remer; contracter for brick work, J. Hewes; carpenter work, R. McCann ; gasometer, Leavitt.- Cost,
Shed for the Harbor Commissioners on Broad way Wharf. Contractor, John McCann. Cost, $\$ 3,990$. Shed at Saucelito Ferry Landing. Contractor, Shaw. Cost, $\$ 1,300$
Shed at North Beach, on bulkhead. Contractor, T. H. Day. Cost, $\$ 13,600$.

Two-story house with basement on Geary street, near Scott. Cost, $\$ 2,500$.
Alterations of house on Scott street, near Turk. Owner, D. Vandenburg; architect, Mr. A. Schroe pffer ; contractor, Wm. Wharff. Cost, - Schroc pffer ; contractor, Win. Wharff. Cost,
Two-story frame on Turk near Scott. Owner, Mr. Cutler ; contractor, D. G. White. Cost, about Mr. Cut
$\$ 1,500$.
Improvements and additions to house on Devisaero between Turk and Tyler streets. Owner, John S. Gray ; contractor, J. W. Spencer. Cost, a bout $\$ 1,000$.
Additional story to the building used by the Risdon Iron Works on Beale street.

## napa.

Twö-story school-house. Arohitects, S. \& J. C. Newsom. To be only partially finished at present. Contractor, J. Griffith. - Cost, $\$ 3,999$.

## sandwich islands.

Two-story and basement residence for Claus Spreckels. Architect, Chas. Geddes. Day's work, and will cost in the neighborhood of $\$ 50,000$.

SACRAMENTO.
Two-story frame dwelling on Tenth street, be tween K and I. Owner, Chas. MeCrary; architects, Babson \& Seadler of Oakiand; coutractors, -. Cost, about $\$ 10,000$
temescal.
One-story and basement building to bo used as a billiard room, near Temescal. Owner, Capt. Ainsworth; Architect, Clinton Day; contractor, Childs. Cost, -

## alameda.

Cottage on Alameda avenue. Owner, Luseombe architeots, Meeker \& Banks; contractor, F. W. Knight. Cost, $\$ 2,500$.
High street, three-story, attic and basement dwelling. Owner, Capt. R. Thompson ; architect, W. Patton; contractors, Haskell \& Smiley.. Cost, in the neighborhood of $\$ 55,000$. This job was reported before, but not fully

Ten-room two-story cottage on cornor of Buena ista avenue and Oak street. Cost, ubout $\$ 3,000$ Tive-room cottage on east side Park avenue south of San Jose avenue. Owner, W. E, Brown: builders, Gilbert \& Brown. Cost, $\$ 2,000$.
Five-room cottage on east sido Park street, between San Jose and Clinton avenues. Owner, A. Newman
$\$ 1,200$.

- Five-room rottage on east side Park avenue, south of San Jose avenuc. Owner, E. L. Wagner; builders, Gilbert \& Brown: Cost, $\$ 1,200$
Cottage of five rooms and bath, on Eagle avenue, between Park and Oak streets. builders, Gilbert \& Brown. Cost, $\$ 2,000$.
Four-room cottage on south side Encinal avenue, between $\Theta$ akk and Walnut streets. Owner builders, Gilbert \& Brown. Cost, $\$ 600$ and Central avenues. Pearl street; between Encinal and Central avenues. Owner, -; builders, Gilbert \& Brown. Cost, $\$ 500$.


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 Cooking and Parlor Mantel Grates
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in yrates of ordinary construction it is found imposil the fuel at the farther bustion, and that the fire Is always brightest and best at tis
 ends of the Grate so as to confine the fuel more to the center,
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settles down, and no cold air is allowed to enter and obstruct at the ends or sides. Another most important advantage of our Grate is, the combined shake and dump basket, with concave Grat 18, whe combined the draught at once, whlle the coal is un-
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FORMERLY THE CALIFORNiA ARCHITECT AND
AUTHOR BUILDING REVIEW
FORMERLY THE QUARTERLY ARCHITECTURAL REVIEW
VOLUME II

DATE 1881

PUBLISHER
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VOLUME II.
NUMBER 1.

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## BUILDING REVIEW.

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SAN PRANCISCO ARCHITECTURAL PJBLISHiNG CO.
JAMES E. WOLFE, Editor and Manager, 240 Montaonery Street.

GEO. H. WOLFE, Business Manager, Room 11, 240 Montgomery st.

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## Volume, in January, 1881

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place of its publication. We therefore appeal to

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 in the permanent establishment of the FIRST AND Mountains, to assist by their subscriptions and personal influence , to a certain extent, segregates California from the commonywalth of Stateato Earn from

## A Word With Our Patrons

A success far greater than our most sangaine ex pectations, 18 the result of the first year's publicathe of this journal. Commenced as it was under the most inauspicious and discouraging circumstances, many predicted for it a limited career and speedy suspension. Judged by the fearful condiion of the building business at the time of its first political the demoralized and chaotic state of affairs the then future, sufficient grounds combined to furnish seemingly journal grounds for the prejudgment, that a new The early decial character could not be sustained that "no such word as fail", by its management was received by many as visionary be considered But developed facts illustranary and problematic and calculated tions, upon which the enterprise fixed determina it is here and now repeated that its and permanency as a monthly publicotion is to fold more substantially assured than when ten the commencement of 1880 , the statement appeared in its columns, that while pared to its present frornia Architect and Buildivg The Cal would continue to appear in the. REVIEN firmanent, seeking increased magnitude through earnest and diligent effort, and the many oxper ences which strew the pathway of those who aim for better and higher success. Its second volume commences under widely diferent circumstances from those which existed one year ago. We forbear recital of the gloomy chanical operations in all the various branches to such an extent that but few ventured the hope that a revival would set in fur years to come; and trade and commerce hung in the balances of uncertainty. But the clouds have already disappeared, and 1881 opens full of brightness and promise to the Pacific Coast, and the people of San Francisco rejoice again that the worst is passed and better times have come again. The indications are clear that a long-continued period of prosperity is before us. This conclusion is justified by the facts that numerous extensive enterprises have assumed appearances and proportions which forbid a doubt but that in the near future many of them will be consummated; while in building operations the number of large struotures already commenced, and the many others seriously in contemplation, and for many of which plans are prepared and preparing, sufficiently por-
trays the disposition of mind among the moneyed men of San Francisco. The millions of gold which auring the three years prior to the summer months of 1880 , disappeared in bond and other investments, or was driven to other sections of the country for employment, seems to be returning and seeking its nest in property and building improvements and other permant ententerprises ; which renders assurances doubly sure, that San Francisco and the Pacific States are about to enter upon a period of splendid successes.

IS THE business outloook weill sustainen?
We think it is, and for many reasons: first among which is the fact that the indications manifest themselves more prominently in leading business circles, and among capitalists seeking investments of a permanent character. The induoements havulating the present and prospective activities, have their origin in the well-sustained certainty that the commercial, manufacturing, and general business prospects of the Pacific States justify the utmost confidence in their future; while the mineral, coal, and other resources stand forth in such magnitude as to forbid the doubt that large and paying returns will not result from every judicous in vestment. This period of prosperity will naturaly call back many who were driven away from this city by the mad follies of political demagogues nd knavish would-be "reformers," who during iohtee ycars of their miserable rampage upon all right, law, decency, and commion sense, and their RECKLESS EFFORTS TO SECURE PLACE AND POWER, cared not that the vital interests of the whole country perish, so that from its ruin they might build up a political pandemonium, in which the will of the masses would have been forced into submission to the dictates of men governed solely by selfish motives, and the spirit of rule or ruin.
in the best inten'ts of this city and sitate the influence of this journal will be devoted with all the energy and ability possible in its management. While architectural, building anitary manufacturing and mechanical matters will be principal features, every other material interest and resource of this western coast will receive deserved attention, and through its columns weshall send very portion of the United States, and to all countries wherein the English language is spoken or anderstood, correct and reliable statements, setting forth every material fact calculated to truth

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Dangerous Errors in House Construction











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News From Abroad.


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## PROSPECTUS FOR 1881.

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Its second volume will commence with its January number, 1881 , and induluding the $Q u$ uarterly for 1879 , its third volume.

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possible will be cheertuly given to all parties seeking the same through this ofice.




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¿SAN FRANCISCO, FEBRUARY, 1881. $\quad \substack{\$ 2.00 \text { per Annam in Advance e } \\ \text { Single e le Copies, } 20 \text { Cents. }}$
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THE CALIFORNIA ARCHITECT AND BUILDING REVIEW


THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.

|  <br>  Iarly in in tho prelimininy movements that every man who has really qualifed himself for the prac. tieo of architectur has done so by the independont exercise of his intellect and seef-reliance, which naturnlly ingpirse a senge of personal confidence treps in, and umloss the mind is well balanead, and creet worls and nats are apt to follow. Perfected <br>  <br>  the point of fear that in hanest striving for con disturb the harmonious co-operation of all, and so prevent the orgaiization of $a$ society, which, if on the part of its momberer, mast meeoome orpower <br>  of gound judgmentand and wise and prudent example, to tho end that those who have permitted so many years to pass, without providiust the advanatages for themseltros sounht to bo obtained by the proesent movement, may secure them in prorfect neses and beanty boforo the labors of life shall be completed. <br>  <br>  existence, where the withering and deeayy of the mentand faculties begin. <br> Competitions and Low Figuring. mpetition controlled by diseriminating judg. -ment, beased unon the true valuuport things sesitianted <br>  <br>  $\qquad$ <br>  contructs. In this regard contractors have been widely at fuult in San Praneieco, not onty in ianiling to pro- tect their own own interstst by inteligent and safte esti- $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ $\qquad$ nd bru ght Iosese and reproaches upon themelves nid drawn around meohanicol operations the oloude of disereditt It eannot be denied that very many questionable things have oceurred in this connection, mainly through the premedi tated designs of the defaulting parties to secure profts through dis hoonorable means. Sometimes honorable-minded mene make mistakes in fyuring the value of work ofterexd in competition and thereby impose hard <br>  Konable measures to retriceve losese reselling troes their own acts and unin tentional errors. And it xudervaluations and blunders occurred only with auch men, they would be but few in $n$ number, men of correct priuciples and honest motives ain vected with thher busineas; and in they fhell fill into crrors, such errorgare purely aedidental, generan rosulting from haste in arriving at conclusions |  |  |
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## EVERYBODY'S COLUMN















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## EVERYBODY＇S COLUMN








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| for March; 1881. |  |








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Notice to Architects.
There will be a meeting of arehitects tute, (third Sloope an the Mechanies' 'Inst
tuts street, Thesday afternoon, April 19th, at 2 o'clock Pr. M., f
the purpose of hearing the report the purpose of hearing the report of the
Committee, and to take such action thereon
as may be necessary as may be necessary
A. LAVER, President pro tem.
P. J. O'Convor,
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J. Wright,
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Committee.
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SAN FRANCISCO, APRIL, 1881. ${ }^{6} \cdot\left\{\begin{array}{c}\$ 2.00 \text { per Anum, in Advance } \\ \text { Single Copies, } 20 \text { Cents. }\end{array}\right.$


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34
THE CALIFORNIA ARCHITECT AND BUILDING REVIEW


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## The findustries of the fedacifix.

PIONEER WHITE LEAD WORKS.


PAINTERS' COLORS,
And their Productions are Unequalled for PURITY AND FINENESS




## EVERYBODY'S COLUMN

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 Asthreo Thide out out will expliins very neat wey.























 $\frac{\text { hie mental health, powere, and pleaurre. }}{\text { The Helping Hand. }}$
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American Barrels.









> Practical Test of Railway Brakees. In a reeant experinental teat of the Weating






Exchanges.























The Origin of the Lien Law.





















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Testing Drain Pipes.





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REVIEW.
SAN PRANCISCO ARCHITECTURAL PuBBLSHINE


Entered at ths Post Office at San Francisco, Ca

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Our July Number
WE are looking for ward to No. 7 of preseint vol
uno with promising interest. By that time we ex
peat to perfect






of every owner of real estate, arohitect and
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Kind upo the Pacific Coast, handsomely sus.
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42

Manufactories upon the Pacific Coast






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THE CALIFORNIA ARCHITECT AND BUILDING REVIEW


Pacific Coast Industrie
























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 The taode extract. is an Englishman's opinion, as
expressed in the "London Arclitect.". How. to test Drain Pipes.


















ehango a rail. With the new ystem we economize
not onty the cososties, but as well a a great amount
of labor.













 thy the railidity of my new rail, the ppreading of
Hhy bod is prevented. The whenes revving on the
entire surface of the rail, the ears move without


 quence.
Heretofore $I$ had thought of intrusting to the the
enineer or frrema the operating ot the safoo
guard, or to the brakemen ; but with a




 ing it will appreciate its merits, give it their con-
sideration and alpoe omong uesulu iventions
Working models of my invention can bo seen at



 Tur globula form of the arthh was frrat suggest-
d by Thales, of Miletus, abont 610, B C

## PIONEER WHITE LEAD WORKS.



What is required to institute and carry to a success a manufacturing enterprise?
Nature is generous with her gifts ; but she Nature is generous with her gifts; but she Years since commenced the manufacture o forees man to the exercise of his endow-
ments, to develop them, and give the subments, to develop them, and give the sub- street; between Howard and Folsom, co ment. Thent. very many natural resources of this
thereon erected factories and sheds, for the
Turposes of tho business.
Coast are marvelous, and they impress all
purir
Their whole works, machinery, and apCoast are marvelous, and they impress an Pheir whole works, machinery, and ap-
thinking visitors with the conviction of a
preanees, are on the most approved plans,
great future. With but few exceptions, great future. With but few exceptions, and excel in detail and completeness those
these wondrous gifts of Nature are at pres.
of any other White Lead factory in the ent but mere curiosities, and are spoken of porld.
and written of only as such - with prosy
whis
This and written of only as such - with prosy
theories $g_{n}$ their practical value if atilized. To the business man, scientist, or to the practical thinker who comes amongst us,
it is a matter of surprise that our people, it is a matter of surprise that our people,
with their wealth, do not develop these resources, and build up our coast with a
working and usseful population, instead of working and useful population, instead of
pursuing the seflish course they are now, pursuing the selfish course
which is that of the usurer
$\qquad$ blind to thcir own interests, in in int in-
teresting themselves in the establishment teresting themselves in the estabishinment
of manumatauring enterprises, which will se-
cure for thiem a eertainty of fair returns cure for them a certainty
for their encouragement.
The people of this Coast cannot afford to Iet existing opportunities lie idle, as a
pendency on forcign sources means our im pendercy on foreign sources means our im
poverishlment. Manumfacturing guarantees poverisit ment. Manufacturing guarantees
the reverse, as it furrishes employment to,
and retains among us, consumers, that vital and retains among us, consumers, that vital
quantity in a progressive and permanent
prosperity.
We have much pleasure, however, in be-
We have much pleasure, however, in be
ing able to refer to some notable excep
ing able to refer to some notable excep-
tions to the general apatliy of our business
and moneyed men.
and moneyed men.
Heading this article will be seen an illus-
Heading this article will be been an illus-
tration of the results of the energy and
public spirit of one of the leading and pio-
neer mercantile firms on the Pacific Coast.
his is essentially a home institution,
m the ground through to the funished
tuct of their mills. product of their mills.
Few can realize the
Few can realize the importance to
whole community of this enterprise.
In the first whole community of this enterprise.
In the first place, it encourages the de
elopment of our mines velopment of our mines, as all the pig lead
used is the production of our own coast.
It thus gives the Miners employment. As all lead or
get the metal,
It thus gives the Smelters employment.
The transportation from the producing
points invokes aid of the carriers:
It thus gives Teamsters and Trans portation Companies employment. A very large quantity of oil is used
the grinding of the lead. All this

It thus employs the Farmers
It thus employs the Farmers
It thus gives employment to the Potteries.

The maintaining of a factory requires The main
the services
laborers:
It thus gives employment to an Army of Operatives.
And in fact, everything in and about the Arks is of home manuifacture. Now, what
wes the employment of the many branches Des the employment of the many branches
ondustry hereinbefore e numerated demnstrate? This fact: that as they are all
onsumers, their wants engage every busionsumers, their wants engage every busi
Ress on the Coast to supply them.

Pioneer White Lead Works
Is not excelled by any other make in the vorld. It is guaranteed stricithy puree; it
s white, very finely ground, and has superior ody and covering properties.
The manufacturers announce their deter The manufacturers announce their deter-
mination to always offer it to consumers at
年 mination to always ofrer ito
less prices than any imported drands.
As against the imported, there would be As against the imported, there would be great economy in its use, even at equal
prices. All painters know that White Lead
that has been packed any considerable time that has been packed any considerable time
loses a great deal of its vitality, in the aboses a great deal of its vitality, in the ab-
orption by the kegss of a considerable quan sorpy of the oil, leaving a hard mass in the
teg, involving time and expense in its exeg, involving time and expense in its ex-
raction and working up for use, and a costly addition of oil.
The Pioneer being all freshly packed, all this expense is avoided.
We know what the White Lead is, and We have no hesitation- in fact we take
pleasure-in recommending our brother ar-pleasure-in recommending our brother ar-
chitects to write it in their specifications chitects to write it in their specitications
and to insist on its use : first, on the score of quality; second, economy; third, the
jeneralbeneft to all of us.



Plate A_-Front Elevation.


Plate B.-Perspective.


Padific Saw Mmulactriniug Cumpany,

## 17 and ig Fremont St., San Francisco.

## GESFITIALLY A HOME INDUSTRY

This establishment has the most ample and complete facilities for the manufacture
Saws of every description. Repairing in all its branches, retempering, straightening, gumming, grinding, polishing, etc.
We make a Specialty of the
We make a Specialty of the Manufacture of the N. W. Spaulding Patent Circular
Saw Plate, with inserted adjustable teeth. This is Saw Plate, with inserted adjustable teeth. This is an invention of incalculable value to the lumbermen and sawyers, as the plate of the ordinary saw, which is very expensive,
becomes useless when the teeth are worn out. But this patent plate is so constructed that when the teeth are worn out, they can be detached and new ones inserted, thus saving the valuable part, i.e., the plate, and affording the advantages of a new saw at a nominal expense
We would call the particular attention of woodsmen to our Cross-cut SAws. We make them of any desired length, and ship them ready for immediate use. We guarantee our new Patent Tooth Saws, with our patent.drags or clearing teeth (either doubl or single), to excel in cutting capacity any other make of saw
With our improved machinery we are enabled to grind these saws from the tooth to the back with a perfect bevel. Our saws therefore can be used with less set than those of any other manufacture
every description ; cross-cut with elinessif quality of steel. We keep on hand saws of every description ; cross-cut with elassified cutting teeth and single and double drags,
tenon or framing with diversified teeth, pit, taper drag, gangmill or sash, muley, narrow pointed or ship carpenters, steel-back butchers, buck or wood, hack, table, compass, key-
hole, pruning, etl.
$N_{0}$ saw is allowed to leave this establishment until it has been tested : we therefore
are enabled to guarantee every saw that comes from this house.

EVERYBODY'S COLUMN








 Wo have recei ved thece oumunieations, the past
month, all referring to the same sibjeot., $A$ delia




BUS. MaN. of Ancurrrecr.- Youn will oblige me to fill holes in iron castings
F. G. S., Marysville.



Whrizw ash for ourside Work, -A thrift
 Take of good quicklime one half a bushel; ;llack
 White vitriol should be diselved before they a with water to give proper consistency.
the mixture is then applied the better.


 is enormous. The roof is divided into 1 lis sections.
ench of which requires 1, lovo,000 pounds of lead.
Send for a copy of the "Steel. Square and
its Uses." handsomeis buna and illustrated.
Price 75 cts.

## ARCHITECTURAL COMPETITIONS.

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 on; architect,
Cost $\$ 8$, ooo
Twostory
and basement frame dwelling on Sut

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chitect, H. D. Mitchell; contractors, Hughes
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 and Page. Owner, Theo. C. Beo; architects, Cur




 Fourstory and basement brick building on oorre
Market and Maias streets. Owwer, - Gibbs ; archi



















Publication Notices





## COMMERCIAI

 INSURANCE CO. OF CALIFORNIAfire and marine.
Principal Office, 405 California Street,
JoHN H. WISE, President. has. A. LATON, Seeretary. ThE GRNERAL MERCANTLLE
OLLECTION AND BUSINESS OLLECTION AND BUSINESSS CO
330 PINESTREET, ROOMS 11 and 12.
E. P. EDSALL, Sect




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THE CALIFORNIA ARCHITECT AND BUILDING REVIEW

## ARCHITECTURAL COMPETITIONS.




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Forty yeara ogo Portland cement.
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Roman coment








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 Alont Almost orery propernty-whether to oits




| Specimen Correspondence.-A Clear Case of Dementia. |  |  <br>  <br>  <br>  <br> in itt limits. "P."." taoitly yimita and such is the <br> thie eity by confning his "gweeping eriticiems" oresidenee buildings. That thero are in this oity <br> many fine specimens of arehitecture, both in dosign and conatruction, will not be tisputed by reosona- <br> Sle and unprejudiced parties qualified to dotermine <br> ast osty lef and general appearancosf; some admiring <br> This, how wever, isa a ondition com mon to the <br> Slob; and while eve have diveratitee of of tylyes in <br>  the $A$ rgognaut, that taste, jud gment, and arohitect. ural akkill has been exerci ied in their designing and construction; and that too by the very men who have been denominated by the man in Washington, However "titupid" "the frrhititectsor of San Francisco may be, thero is in them enough of good sense not to value such slanderous scurrility as worth the least consideration, and we should not have noticed it in these columns, only for the purpose of refuting a gross misrepresentation which should never have miserpresents fatt to the outside ow wrid, and <br> Adulterated Linseed Oil. <br> BX ALFRED H. MASON, F.C. S. |  |  |
| :---: | :---: | :---: | :---: | :---: |
| There appeared in the Argonaut of May 7 th, what purported to be a letter from a Washington, D. C., , |  |  |  |  |
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| Washington, D. C., or tho Stockton or Napa Luna- |  |  |  |  |
| so indiscriminate and unjust in representations, |  |  |  |  |
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| or have renched a condition of mind, that whether writing from the snow-clad peaks of the Andes or Sierra Nevada, would as likely imagine himself |  |  |  |  |
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| Sierra Nevada, wonld as likely imacine himen roaming through the orange groves of Sicily, Los Les |  |  |  |  |
| or Japan, as boing seated in regions of perpetual <br> His hallucinationsate so amusing, that we reproduce that portion to which we specinlly refer. He signs himself " $P$.," and writes ns follow |  |  |  |  |
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| that the renius of architeoture in California died with the old man Bugbee. If there is a really a hand |  |  |  |  |
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| some private residence that ho did not plan, I am not advised of it. The insufferably plain house |  |  |  |  |
| with its hall and side rooms, its narrow stairesees |  |  |  |  |
| eading up from the front door, the inevita indow, the cheapand nasty scrollwork of the planng mill, all built upon a uniform model, is in |  |  |  |  |
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| dreadful contract with the benutiful, inexpensive, and varied houses that adorn the city of ashing-ington. (Nem.-If any architect advertise in the |  |  |  |  |
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| ington. (Myont, except him from this sweeping eriticism You may except Mr. Augustus Laver, if he does not |  |  |  |  |
| ad vert ise:) Yexes, Washington is to be a beautiful |  |  |  |  |
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| wealthy, and cultured people, in which there will be no riots, no labor strikes, no uprisings. There |  |  |  |  |
| trade nor commerce to any grreat extent. Its oiti- |  |  |  |  |
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| loyal, penccable, and law-abiding, through their in- |  |  |  |  |
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| ism. If:San Franoisco architects are not, the writ-er " P ." Is "imaginative "- that is, in the con-coction of statements entirely at variance with facts. |  |  |  |  |
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| "Educated" in the art of grossly misrepresenting an entire profession, many of whom would refuse to |  |  |  |  |
| exchange their "stupidity for the KinD of daua-tion displayed by this Washington, D. C., lunatic, |  |  |  |  |
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| ifty or more persons, engaged in the practice of an |  |  |  |  |
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| honorable profession, only a fractional number, if any of whom are personally known to him, to ena- |  |  |  |  |
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| aginativeness," he enters the sacred confines of |  |  |  |  |
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| from good and worthy motives, but for the purpose |  |  |  |  |
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| very fine residences, and enjoyed -an honorabie rep. |  |  |  |  |
| dencos in San Franciseo," enjoying any regard for |  |  |  |  |
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| dorse the mean insinuation of "P. There have, |  |  |  |  |
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THE CALIFORNIA ARCHITECT AND BUILDING REVIEW

## ARCHITECTURAL COMPETITIONS

 Hrough the ourteas of ono of our most prominent








 An holper London arehitect writes
I"I $T$ heve never once engazed in










 Another architect writes:





 so "have been a heary logere of time and money














54
THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.










 Number Eight of "Copyrighted."









Hot and Cola Baths.














Utilizing Straw Lumber









THE CALIFORNIA ARCHITECT AND BUILDING REVIEW

| In Scotch pig iron, same conditions, resistance eeased at a strain of about 6,000 pounds. The Placer coased al a strain of about 6,000 pounds. The Placer county iron is said by all experts to equalthe Salis- bury (Conn.) metal for the manufacture of car wheels, and can be rolled into "merchaurs bar" of best quality. best quality. The furnace is at present supplied with ore from deposits immediately in the neighborhood of the deposits immediately in the neighborhood of the works. There are fine cuts within short distances of each other, and in two of each other, and in two,-true fissure veins, with well-defined walls, have developed. The 640-acre tract on which the buildings are situated, and where the mining is yet in its incipient stages, is no doubt one vast iron field, as every evidence exists of ore in every direction. Beside this apparent inexhaustable supply, the company have in possession some eighty acres, called the "Sott mine, "about four from the road, two cuts have been made, revealing ore of the richest quality. A magnificent body of ore has been exposed here. The character of the ore generally is what is known as "red hermatite, of cherry red to a reddish brown color, and whioh, percentage of metatic iron than any other variety. While magnetite assays 72.41 , hematite gives 70 . Pure hematite is the ore that furnishes the iron for the manufacture of Bessemer steel. The number of Furnace hands. <br> Employed in mining............. <br> The demand for bound volumes of this journal for 1880 has been such that we have had 500 additional copies bound, which we will send to any address at the reduced price of $\$ 2.00$ per volume. |  |
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## PIONEER WHITE LEAD WORKS.

What is required to institute and carry $\mid$ Messrs. Whittier, Fuller \& Co. several The maintaining of a factory requires to a success a manufacturing enterprise
Nature is generous with her gitfs ;bits sine since commenced the manufacture of the service
White Lead in this city.
laborers: Nature is generous wixercise of his endow- They purchased ground on Fremont
forees. man to the exer.
ments, to develo them, and give the sub- stret, between Howard and Folsom, cov-
sor ments,
stance a form for his appreciation and enjoy-
menting a setractace of $13766-12 \times 275$ feet, and
enereon erected factories and sheds, for the ment. The very many natural resources of this purposes of the business. Coast are marvelous, and they impress all $\begin{aligned} & \text { Their whole works, machinery, and ap- } \\ & \text { thinking visitors with the conviction of a }\end{aligned}$ pliances, are on the most approved plans, thinking visitors with the conviction on a pliances, are on the most approtes those
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these wondrous gifts of Nature are at pres of any other White Lead far
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practio matter of surprise that our people, whole community of this enterprise. with their wealth, do not develop these In the first place, it encourages the de resources, and buila up. out coase whe a
working and useful population, instead of used is the production of our own coast. working and sefifgh course they are now, It thus gives the Miners employment.
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State ing able to refer to some notable excep- It thus employs the Farmers tions to the general apathy of our business
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onstrate? This fact: that as they are all onstrate? This fact: that as they are all
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ness on the Coast to supply them.

Pioneer White Lead Works
Is not excelled by any other make in the world. It is guaranteed strictly pure; it
is white, very finely ground, and has superior is ohite, very finely ground, and has superior
body and covering properties. body and covering properies.
The manuacturers announce their deter-
and nination to always offer it to consumers at
less prices than any imported brands. ess prices than any imported brands.
As against the imported, there would be
great economy in its use even at equal great economy in its use, even at equal
prices. All painters know that. White Lead prices. All painters know that. White Lead
that has been packed any considerable time loses a great deal of its vitality, in the ab-
sorption by the kegs of a considerable quansorption by the kegs of a considerable quan-
tity of the oil; leaving a hard masis in the tity of the oil, leaving end expense in ite ex-
keg, involving time and
traction and working up for use, and a traction and working
costly addition of oil.
The Pioneer being all freshly packed, all this expense is avoided.
We know yhat the White Lead is, and
we have no hesitation-in fact we take we have no hesitation-in fart we take
pleasures in recomending our brother ar-
 and to insist on its use: first, on the score
and of quality; second, econom
genereal benefit to all of us.





THE CALIFORNIA ARCHITECT AND BUILDING REVIEW


THE CALIFORNIA ARCHITECT AND BUILDING REVIEW





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©he Cialifornia Avrhitert

## BUILDING REVIEW.

SAN PRANCISCO ARCHITECTURAL PUBLISHING 60
JAMES E. WOLFE, Editor and Manager
240 Moxtoomany Srexer.
GEO. H. WOLFE, Business. Manager,
Room 11,240 Nonttomery st .
part of the U. S., Dostage faid, at $\$ 2$.
per annumun weith currai cost of postage when
to Forcien Count
Entered at th9 Post Offico at san Francisco, Cal,
advertising mates.

## 


Our Enlargement and Improvement-No.I
It is with feelings of great satisfaction and
pleassure that we direct the especial attention of
our readers to the marked
our readerse to the marked improvement shown
in the present issue of this journal.
Four additional


heretofore announced, that improvements should
appear rand in hand with the inerease of sub-
soription and advertising patronage. And hav-

to make it worthy of still greater encouragement
with the hope hhat the eftorts put forth to esta)
lish in Son Franciseo a jourral of high mer
 and hearty subscription co-operation, support
and indorsement from all arhehitects. contractors,
owners real estate, mechanics in all branches,
and the entire peol. owners of real estate, mechanics in all branches,
and the entire people of this western slope of
our traet ountro whic will
feect in sple us opendid style all that has been and is


 interest on the part of every reader of thims jour-
nale particularly here in San Francioco and upon
the Pacific Coast - so that thousands more nuay nhe particulariy yhere in San Francisco and upon
the Pacific Coast so that thousand more nayy
add their subscrition, thereby enaling the
greater im
 We have repeatedly stated and mean it, that
this enterprise was ont started merely for pur--
poses of personal gains and profts, but to estab-।
this enterprise was not started merely for pur- of of are, or the e erection of edifices and structure
poses of personal gains and profts, but to estab-
and description.



 suures of this Gud-biessed heritigs

 Archirger Axp
vell filled this neessity, notwithstanding the
averse circuiustances which have thus far ren dered it less raluable und interesting than
would have bell inder more frovorate condi
ond we intend to press tian up to a h hight stand ing
unong the journals of its class, as rapidy as may
tions and mong thib journals of the
be posibe contemplate and promise suche enlarge
We We contemplate and promise such e enlarge
mentand improventst as will render iture
ceptionally excellent in all of its departunent and all we ask in return is a yenerouq suppor
coequal witisits merits, and our efforsts to make
it satisfactorily good in all respects.

Picked Up the Trade

 studdes in arithmetic at the compound number
without any prior knowledge of the rudiment or valu of thiures. The one never becomes
procicient; nor the other, as a rule, counpetent
as a mechanic. Oceasionally, when a man has
O.

 in his attemptsat new acquisitions. But dingenc
alone will not seceure sucuess, unless accompanie
In son by determination and purpose. In some, thl
trait of character understood by the term
nai
 strean against a more or less rapidly descendin
current requires not only that the boatman sha current requirss no and muscle, but equally
he stron of arm and
will and purpose: and ovene these possessed
will
 the extent to wht. In but few cases compara
beocme competent.
tivel tively, do men reach a good reputation in ant
purumit pieked ap during the years of maturity
witho t the aivvantages, discipline, and trainin
 standings; and it it if law of our humanity tha
the early years of life is the better and prope the eary years of hife is the better and proper
tine toteght hhe ducations which are to octrol
the future. True, sometimes men are endowed the future. Truue, sometimes men are endowed
with in inherit special and naturar fithess in
certain directions; and althought circumstance vey for a time prevent their development, when ver opportunities oner more than orrunary.e.
ults follow. But as. rule aprentieeship san
tude and training is a prerequisite to mecha
 end their manhood views of life's work to be
come boys againc Manrity of yarrs rings ala
naturity of conceptions and ambitions, and dhe
 "ititle things" which are so essential in perfect-
ing mechaniecl eduaction, and which boy in
apprenticeship are forced to observe and practice,
 as expressed in in everery why and ard rure of of things,
reanon and experience, to suppose that those wh
 cidentally secure to themselves that deep an an
thorough knowlede of ractical mechanical a
and science which those roses and science, which those possess who commence
at the right period, and pass through all the
cultivating and maturing stages which fit and cultivating and maturing stags
qualify the perfect techanic.
A New York "Tinker Plumbing" Trick.
We have seen some "awfully" bad plumbing
work done in San Francisco, and known of tricks
ork done in San Francisco, and known of tricks
of he nost rascally character being played but
thing to surpass in absolutue mechanical vill Tothing to surpasss in absolute mechanical villany
the e oflowing . We fro the story related ina
heent unumber of the Sanitary Engineer, which

 the third foor, a two-nch sheee-tin phpe our
tun to take the drainge from a sink
tuaders will not be surprised at the assertion o
 culd be no saving in using tomato-cans for sol
ipe, as the labor was ocsidierable. It seems
he man who did this job was a tinker, and he


 nent will seem improbable to many of our
readera, but we ean assure them that this nove
sil-pipe has been roouth to uy Mr. James
Kuir, one of the best-known plumbers in the Muir, one of the best-known plumbers in this
 luce a nore raseally example of dishonest prac
tice in San Francisoo we shall be glad to hear
from them, and shall not be greatly surprised at

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## Architectural Competition

NUMBER III.
In our last we referred to a third class, to
hich we would draw attention. We mean those which we would draw attention. We mean those
owlon competion has been lamentably dis-
ppointing, and who have beenn tempted by the ppointing, and who have betn tempted by the
Ilurements of the competition ysstem to to
give p promising appointments in established othice
hich have been filled by others, whho in thei Which have been filled dy others, twho in their
urn also have been draw hawy in a simiar
nanner, until the profession has been in a meass urn also have been
nannere, until the prossion has been in a meas.
ure overrun with quite an army of men, in are orerrun with quite an army or mene
nany eases not possessing sufficient power to

command suceess in competition, nor sufficien | command success in competition, nor sufticient |
| :--- |
| practical knowledge end experience to be busefuin | practical kowedge

ther than very inferior opsitions as architectural
And raughtsmen. And it is anong this class that
we find the effecto competition is never to
en courage the generous sympathies of compefitiors,
but alwas too rovoke enve, false hope, and
self-coneeit insufferable. There is more hant
. burning among these would be architects, caused
vy their failurues in eocmipting for designs than
scaused by the result of conipetitions in any caused by the result of competitions in any
other profession. So par we have seen that the firmer mainten-
snee of the competition system lies in the tup-
and
nosition, that modest merit ean thus obtain its.

 nan who in professional lifif is the most fortu-
nate, is hie who statr sithout false aids without
aillacious incentives, withoout sell-conceit, ond

 ort car permanent In plain language-at the
ve of torty
it which , min may expect to acequire a position
a p porossion as istincuished from atrade, he
ds himself beginning to know the world well outh has passed into full manhood and he hat
teant wenty yera s ofor hin durny which
employ his energies at their best, and to whi
 gain by them ?
Our conchuding artiel upon the subject under
sideration will appear in in un August number onsideration will appear in our August num
nd will be confined to competitions in Califor

Castings.
Castings seem to take to themselves peculiar
caks of irregularities, the causes being difificult diefne. They ocour sometiines in the sand metimes in ramming, somet mes instance, the uality of tacing sand must one made, heary or light, deep-or- shallow in the molat, Again
inferior cool in facing sands is detrinental
Possibly the dealer in foundry facings has been
 arbon in the form of eold. There has been
ron pouring against the with the eoal. This
dirt and slate erund
and
cause of sabiby castings, together with two







Felaows and Associntes of tie. P. C. A. A Architecture is generally definied to be. A. Ahe Artof Building," but this




 nations, but the art of Architecture can only be the result of society
ennilihtened by ivilization and mother arts.
It is an art that ret It is an art that requiresegreat judgnent and diversity of studies to
enable a connoisseur to form correct opinions of the works of others, and is a coniniodseur by theory and correct opicinions of the works of others,
The theory of Architecture is that knowledge of it acquired by the The theory of Architecture is that knowledge of it acquired by the
study of the remains of antiquity, by the writings of the most learned
authors, and by meditation authors, and by meditation.
The practice is the knowledge which is gained by the executing and Tondueting of buildings.
The etymology of the word Arehitect indicates that the person
thus designated is the inspector and chief of those employed. in the
 and their exxecution, which supposes a union of rare qualities and very
extended Kowledge
When wxe consider the time required for the study of Architecture, When tee consider the time required for the study of Architecture,
the neessary expense e inumred,
the and thaining various dificulties incident to the neeessary expenise incurred, and the various difificultes incientent to
the antaining of that degreo of talent which warrants the assumption of
the title of Architect, how unimportant the remuneration it presents the title of Architect, how unimportant the remuneration it presents
to those who follow it as a profession, notwithstanding that its $u t i l i t y$

 canvasi
With the
Wrahitect it is
 is called upon to produce, or by the qualities of the materials to be be
usse in the construction and it may be by the idiosyncrasies of his
client and hence in client; and hence, in order to appreciate or criticise any work, no mat-
ter how extensive or insignicifant, in intimate knowledge not only
of the art itself is required but ter how extensive or insignificant, an intimate knowledge not only
of the art itself is required, but also of all the circumstances incident too
the errduction of the design. These remarks are pertinent to the
 tion - for too often, I regreet to say- that the jud ges are totally yinmponpe-
tent for the task ketbefore then, and the man of talet is drivenway tent for the task set before then, and the nan or ore thise productioy
to make rom for the patronzed and therefor arise those
which are found so unworthy of being transmitted to posterity. Which are found ou unworthy of being transmitted to posterity.
Literary knowledye and hhistory are muhch more requisite to the
modern than they were to the ancient Architect.
 isfactory reason for the employment of every architectural object which
his design might present
How much more indispensable, then, are these studies at the present day, since by the adoptions we may make of the antique A Arehiteeture,

The kno wledge of history, as it includes that of Architecture, dis-
closes the revolutions of an art which, more than any other, is linked
to the destiny

 ferent ages by different nations, and he will habituate himself to the
disecrument which the monuments of antiquity require, and the studies
he ought to deduce from them. he ought to deduce from them.
of thorough conception of Architecture there should also be
added ani hintimate knowewledge of sculpture and painting.
 the celebrated ancient Architects, who to a proticiency in Architecture
united sumpriority in the other arts, of which it is rare in the present
day to attain eminence in one.

 excert nom






























































 Condene geiolgiget will tell us of animals which hived in former ages -tho








 thus nakedy, the question can reeeive but one answer. Yet, how
othererisare we to
hocount for










 Trateo find in the earier ages, except when the artit is in a manifestly
transition statee between two styeses that it is tu unitormy g governed in in So min oharacteristios by the olimate, the materials, and hhe hanits




 men of the difierent buildings there preserved, and by their appropri-
ate deocration Tathe iruphtion of the Northene nompleted the destrutetion of the ener











devotion the iissolution of their mighty union, their art has woftuly de Sinee the dissolution of their imghty union, their art thas wotully de


 onfseation of church property, as in in some European eountries, an! is bestowal upon laymen, would open a wide door for thea adimision




 Unues; and the absurdity is often heightenend by basooiation with phat but



 deeds of bravery and chivary, buta a mero man on oftraw fater alile of the temples deseribed in the ancient auturors, and and the wititing
 Hecture, and ther efore were the temples of an extinct or degal

 Perices. Experiences seems to prove that in its purity this style Simates siminar to that of Greeee. Classical A Architecture, at any rate The present, hase, in the Unitea Statees, supecumbed to the Queen Ann
 wild fire-pliceses for warmth, which are for the most part introduced
whe





the califorinia architect and building review.

##   Unumph hatare readining it <br> he essential features of one class of religious The introduction of the essential features of one class of religious   there is no ans ungestin intended

Laying Bricks Properly.
The Builder and Wood Worker in reviewing the
"Hollow Wall," question, among other things,









 he best impression possible, with the knowledge laying up the greater nusterer ofualy brick mad per
hy. This state of thing can sarcely be won
hered at, since owners are unviling to have


 of the engagement; whine on the ouner inant,
the owner paramount interest is founded in the
characher of work for which he is expected to
pay his money. But, as a rule, the contractor
But pay his money. But, as a rule, the contractor
hans he dvantage, unless the sperenitendence
is under the wathul eye of some thoroghly
conden under the watchiul eye of some thoroughly
cmpetent and skillutl man as "cleler of the
orks," to be ever on the alert; and even then,



 untranmeled by limitage of cost, and the par-
ties doing the work are fully competent to its
execution ine execution in a proper manner. if our contem.
porary simply proposes ot apply the term im
practioable to the prevailing rules and customs rat ios in in connection wivh contract work, and not as a mechanical fact, then it is eorrect. The
point of argument with us is, that defects whieh
existst throush common customs and practices, exist through common customs and practices,
should not be harged as inlerent defects in
mechanioal
mechanical principles.
Because walls have been built in San Fran-
cisco, and perhaps in other cities, with "chunks"
of timber thrown in, and dry bricks little better quality and quantit
porous sature of the
phe watang and d
could be overcome

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speciousa
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contenplat
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Should the foregoing to the smallest degree furuish any new da
for meditation to the e thoughtitul studentit in Arechitecture, or enable t





It Sometimes Happens this Way.
$\qquad$
the erection of buildings, giving outline enctai
size, character, expenditure, etc, and the

 moderate "ployed are fitact." Anther unged the ingu

$\qquad$$s$ made that fund point being reachednd disocover not be so limited as an
st supposed
sit



positions imposed in such cases are certainl)
anfair and unraeasonable, but morer generall
architects submit to them, rather then
d disagreement, and such owners reap the bene
titeir shrem

66
THE CALIFORNIA ARCHITECT-AN BUILDING REVIEW.


The lllinois Plumbing Law.
The Chicago Times gives the text of the law
regulating the inspection of tenementand lodg
lod
 stantially entire: tany anctitect or architects, builder or build-
ers of, or other person or persons interested in,
ent
 50,000 inhab itants, shall submit plans and speci-
fications of such building to the Health Conmis
sioner for sioner, for his approval or rejection, as to the
proposed plans forthe entilation of roomss, light
and -air shatts, windows, ventilation of waterand air shatis, windows, ventilation of water
closests, drainage, nd plumbing
"Any pumber or other peprons interested in
the contract for the plumbing work of of such the contract for the plumbing work. of such
buildings. hall receive writen certifieate from
the Health Commissioner before commencing the Health Commissioner before commencing
the
work on the said buitding or buildigss and shall proeeed according to the plans, speeitications,
and instructions approved by the Health Com-
missioner
(Any plumber, or other persons interested in missioner.
siun pumber, or other persons interested in
the plumbing work, after the completion of said plumbing work, and before any of the said
plumbing work is covered up, shall notify the
Healthn Comes Plumbing work is covered up, shanl notity the
Hoanth 0 Commissione that said building is ready
for inspections and it shall be unlawful for any for inspection and it shall be unlawful for any
piumber or other persson to cover up or in any
way conceal sich plumbling work Plumber or other person to cover up or in any
way conceal sition plumbing work, until the
Health Conmisionor approves the same."
The violation of the act on the part of archi-

The act concludes as follows, expressing the tance of the law:. Inasmuch as the health of
"Emergenc.
He people is endangered, an emergency exists. the people is endangered, an emergency exists
requiriug this àt to take effect timmediately requiring this act to take effiect inmediately;
therefore, this a at shall take effect and be in
foree from and after its passage." - Sanitary $E n$.The use of elm-wood for various purposes is
claming the attention of manufacturers



 in high plpees. Untill lately it was let alone and
considered useless; but any farmer where eln
grows, knows the value thereof. When a new


 contrivance that requires strenthth. One firm
said to be supplicid with hald-million feet oo
cim
The wood is coniint into seneral use, and iim. The wood is coming into. general use, ai
is a valuable adition to the hard.grain woods.
The Northeustern Lumberman.

## A Very Mean Practice.

We disilike to express $\overline{\text { harsh or }}$ hard words,
but annoyances sometimes provoke them, and in but ainoyances sometiules provoke them, and in
thisis instance the provocation arises from a very
. tiss instance the pretiec-that of parties who are
nean cuse or prate
nxious to read this journal, but who refuse to
 course which no honorable hininded mann shoul
practice, unless he betually too poor to pay
the subscription price. And to relieve thas who are thus sunfortunately circumstanced, from
the humiliation of sponying upon thers, wevill
furnish them regularly, free of eharge, provided
 actual inability to pay, buta a disposition to obtain
without oost something esired.
pertinacious parasites spend more for drinke drink, at

sever
year.
Help it On







 of suppord anore upon this ooast and from all
theusians more toun ountry will aid us in perfecting
sand consummating the many high purposes con-
and sections of the country will aid us in perfecting
and consummating the many high purposes con-
on the part of any plumber by fines of the sam
amount for the frit oftense, and of slo add
tional for each day that atter the frist convi
tion, he refuses to comply with the provisio

THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.

| heory h |  |  |
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| a controling influence on the character and clivities of the human race, and that the |  |  |
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| athe $\begin{aligned} & \text { altitudes. However this may be, it is a a fact, } \\ & \text { that all the saviors of the world, the great }\end{aligned}$ |  |  |
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| nenets to the seashore. When thie earavan wasthe means of capitals of the world- Babyylon, Nineveh, Palmyra, etc. - were in the interior of the continents but when the seas began to be traversed by improved methods of naxigntion, the great eommercial marts were transferred to the shores of the seas, at harbors, and at the mothst of greatrivers. $* * * *$ Lecture in Kunsas City Peeview. |  |  |
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|  |  |  |
|  |  | 'The Sanitary Condition of New York, by George E. Waring, Jr., contains the following Smith. * **"One of the best forms of the hopper closet is that known as 'Hellyer's Artisan,' which has a perpendicular rear wall, and the flushing discharge of which pours with con- |
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| California Redwood. - We presume theselected qualities, 3ft. 4in. and that suitable for special purposes, sueh as veneers and curly pieees, are offered for sale in the Eastern markets. Wefind it advertised in Eastern journals. Redwood shingles also find a market in the Eastern States. We have received several letters in reference to the use of redwood shingles, where rain-water isstored in cisterns, so far as the discoloration of stored in cisterns, so far as the discoloration ofwater, etc., is concerned. |  |  |
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|  |  |  |
|  | Wll destroy the strength of come in contact-while-wet. |  |
|  | To Darken Oak Fran of carbonate of soda, and |  |
| A piece of zine placed on the live coals in a hot stove will effectually clean out a stovepipe, the vapors produced carrying off soot by chemical decomposition.* |  |  |
|  | $\begin{aligned} & \text { ge } \\ & i 8 \\ & \hline 18 \end{aligned}$ |  |
| The largest stone ever quarried in Iowa was taken out of the Anamosa quarry a few daysigo. It was 55 feet long, 4 feet 8 inches wide, and 3 ft: 4 inches thick, and was cut out of solid rock, and there was not a crack in it.* |  |  |
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| A Loo of walnut veneer has been imported to New York from France, which for size, color, and freedom from blemishes has rarely been equaled and the entire log contained 9,000 square- feet. Its companion sold for $\$ 5,000$. ${ }^{*}$ |  | odification of the form and arrang |
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| Bands of music are forbidden to play on most of the large iron bridges of the world. A constant succession of sound-waves, especialy suwh as come from the playing of a good band, will excite the wire vibrations. At first the vibrations are very slight, but they will increase as the sound-waves continue to come.* <br> -Lefele's Mectanical News. |  |  |
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| The silk industry of A merica for the year ending June 30th, 1880, employed 34,440 operatives, nearly one-half of whom were women. |  |  |
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| The peanut crop for 1880 amounted to 2,200, 000 bushels, yielding to first hands $\$ 2,150,000$. |  |  |
| The doctcr's best friend-imperfect plumbing work and defective sewerage. These multiply patients and keep the doctors bâsy. |  |  |
|  |  | nia Glass |
| There is no surplus of good workmen in any of the lines of building or mechanical operations in San Francisco, nor in California generally.The unskilled labor of the State is also fully employed, except, perhaps, a few scrubs not worth a penny a day. Six of them stewed down would not produce one average good hand. |  |  |
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| The great need of the Pacific Coast is in creased manufacturing enterprises. Too many mbroad for things which might be made or pro duced within our own borders. If those who have acquired their wealth in California will not improve the opportunities that abound to de-velop the resources of this State, we hope that Eastern and European capital will come this wayand possess - this and possess this goodly land, prelific in ten |  |  |
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$\qquad$ till, so that doijections ppartse itst basin stand

 pipe and drain. The surply is thanen from a a tank
tanaing at a considerable elevation; or, by



lencthy description was siven in the Even-






18 Subacipton price of this journal for

## PIONEER WHITE LEAD WORKS.



What is required to institute and carry to a success a manufacturng enterprise Nature is generous with her gifts; but she years since Whittier, Fuller \& Co. several $\begin{gathered}\text { The maintaining of a factory requires }\end{gathered}$ . They purchased ground on. Fremont it thus解 | and |
| :--- |

inent.
The very many natural resources of thss
chereoserected business.
purpese of And in fact, everything in and about the Cost are marvelous, and they impress all
Their whole works, machinery, and ap- works is of home manuacture. Now, what
thinking visitors with the conviction of a
pliances, are on the most approved plans,
does the employment of the many rachanche
of industry hereinbefore enumerated cem thinking visitors with the conviction of a plances, are on the most approved plans,
great future. With but few exceptions, and excel in detail and completenss those of industry hereinbefore enumerated dem-
onstrate? This fact: that as they are ald
 ent but mere currosities, and as an spoken of prosy
and written of only as
This is essentially a home institution, and written their practical value if utilized. from the ground throu
theories on
To the business man, scientist, or to the product of their mills.
To the business. inan, scientist, or to the
product of their mills.
practical thinker who comes amongst us, , Few can realize the importance to the t is a matter of surprise that our people, whole community of this enterprise. with their wealthil do not develop these In the first pace, it encourches pere lead
resources, and build up our coast with a velopment of our mines, as all the pig lead Working, and useful population, instead of used is the wroduction of our own coast.
pursuing the selfish course they are now, hich is that of the usurer. It thus gives Our capitalists and business men are As all lead ores have to be smelted to
thind to thir own interests in not in-
teresting themselves in the establishment metal, teresting themselves in the establishment . It thus gives the Smelters employure for them a certainty of fair returns or their encouragement.
The transportation from the produc
Their encople of of thisent Coast cannot afford to the points invokes aid of the carriers : pendency on foreign sources means our im- It thus gives Teamsters and Trans poverishment. Manufacturing guarantees portation Companies employment. he reverse, as it furnishes employment ita, uantity in a progressive and permanent i
Wrosperity.
We have much pleasure, however, in being able to refer to some notable exceptions to the general apathy of our business and moneyed men.
Heading this article will be seen an illus-
ration of the results of the energy and publii spirit of one of the leading and pio-
neer mercantile firms on the Pacific Coast.

A very large quantity of oil is used
the grinding of the lead. All thi
the grinding of the lead. All this
is crushed from seed raised in this

## It thus employs the Farmers.

All the pots used in corroding-sheds are
It thus gives employment to the Potteries


ground plan of country residence.-H. D. Mitchele, Architect, 217 Sansone Strebt.






 basement? Ass
tect.
your
solid
larges
stand
sand

$\overline{-}$

Ans._Jabal, a son of Lamech, the Canaanite
was the inventor of tents, thatht, the mighonantremove
where he pleased to feed this cattle.- (Gen
iv: 20 .) where he
iv: 20. .
Business Masagrr of
 ANs. - Probably on account of the water e
isting in the pores or interstices. When the
ither stones are eepososed to the the sunticand air, When the the
is evaporated, and the stones hecone thard. Businkss Manager of Architrect:- What
forms of buts or hinges did the ancients use

Ass. - Doors turned anciently. upon large
pivots in the center loet into sockest in the lintel
and threshold, so that one of the sides turned
and threshocd, so that one of
Busivess Maxaige or Architecr:- What is
meant by a straight-joint floor?
B. D.
ANs. -A floor is lidid with boards of equal
widths; generally tongued and grooved, but in
widhs; generally tongued and groored, but in
some parts of the country floors are lind with
square-edged boards, omitting the tongues and
square-edged boards, omitting the tongues and
grooves. No genel rule for nailing prevails,
but our special view upon this point is fully pre
sut our special view upon this point is tully pre-
journal.
Busingrs. MANAGER of Architrect:-An illus
tration of a simple way to bisect
tration of a simple way to bisect an obtuse or
an aute angle would b bhhanfully received by
one who has made asuy of the problem in
your last in in answer to "Valley Home., Will
y.
send you a different solution from your own,
and you can use it at you think best.
Ans- - Led B D E H be any square. From B
with the radius A B, draw AC Set the gause






 Axs. 1 st. Eight feet, or on- on-quater of the
lenght of the tinber. This will hupty onayy
stick of equal thickness and width throughout.

 men with the bar.
The above is the rul. that is genereally whed by
our mechanies. Suppose, however, that thi our mechanics. Suppose, however, that the
stick is round, eighteen inches diameter at one end, four inches at the other, and twelve feet long. Will some of our friends inform us hat
the rule would operat in such a chase
Suppose a stick of timber is thirty-two fe


 We hope some of ourl carry an equal weight
a solution of this problem.

Bossingss MANAGRr of Archirter:-:Why is
it we sometimes feel so cold in our back when
 apmal

in front-no do sor or window being open $t$. L .
cause a draft?
ANs.- Because it is the nature of cold air to
rush toward hot, , and not hot air to coll.
this
On






ond any radius, draw CE .


CALIFonsia Archirger:- Can you tell me
when fles were first used? What are tightning
fles? ANs. - Let A B C D be the square. Draw the
diagonals AD and C B and the eenter linesef
und $g$. Fron en




THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.
BUsingss MaNAGER or Archirrect:-I have $\mid$ make researches, and find out how long beforo
sele anted a site for a large house, but before
that time files were first used.



 Business min -
 ber of campers in the CAhForita ReDwoons. Ans,
whas the inventor of tents, that he might remove
where he pleased to where
iv:
in.)
BUSinsss Mansemi
are stons softer and
first taken out of a quar

| ARore ensirigcr:- Why |
| :--- |

ANs.- Probably on account of the water ex-
isting in the pores or interstices. When the isting in the pores or interstices. Wher whe the
stones are exposed to the sun and air the water
is evaporateded, and the stones become hard. Bustivess Maxaern or Archirger:- - What
forms of buts or hinges did the ancients use on
their doors Ass, - Doors turned anciently upon large
pivots in the center, let into sockets in the lintel and threshold, so that one of the sides turned
inward and the other outward. Busingss MaNater or Arcirtrcc:- What is
meant by a stright-joint floor?
Ats-A A floor is laid with boards of equal
widths; ; generlly tongued and groored, but in
some parts of the con

grooves. No generl rule for nailing prevevils,
but our special vieru upon this point if fully pre-
sented in the February number, vol. 1 , of this
journal.
Busingss Masader of Architrer:-An illus
tration of a simple way to bisect an obtuse or
an acute angle would be thankfully received
an acute angle would be thankfully yeecived by
one who ons mde ar study of the problem i.
your last, in answer to "Valley Hone." Wi.
your last, in answer to "Valley Home." W
send you a diffent solution from your ow
and you can use it at you think best.


## Business, Manager of architect:- Three

 titmer should a bar be phaced, so that two men
thaving hold othe har and oneat the end of the
timber shall have each an equal weight to carry? Suppose one end of the etick is larger than the
other, is she ena rule by which w ecan easily aseer-
tain where the carrying bar slould be placed? Ass.- 1 st: Eight feet, or- one: MEAarter of the
length of the timber. This will apply to any
 the timber across centerer. . Fravity thy bais conececting
man at the end must be twice as far ans the two men with the bar.
The aro ine it the rule that is generally used by
our mechanics Suppose, however, that the our mechanics, Suppose, however, that the
stick is round eighteen inches diameter at one




 placee, so that each will carry an equal weight
W olu hope sone of our mechanices will send us
a solution of this problem.
-
Bsinsss Maviarr or Arehrrfer:-Why is
it we sometimes feel so cold in our back when Ans.-Let B D E H be any square. From B
with the radius A B, draw A C. Set the
 place, while at the same time we are scorching
in front
cause a draft?
$\qquad$


 hes." (smoke pouring out of the wrong end of directly opposite the fire-place.
$\qquad$



and any radius, draw line CE . With C as a cent


Califorxiu Architecr: - Can you tell me me
when fles were first. used?
fles?
 $D$ square with line $C$ D, cutting at $D$, and angle
AE is bisected.
wiles?

 The Sanitary Engineer states: "That the bill
to secure the reegisration of plumbers and the
supervision of plumbing




 enforcenent.
show think that our leading plumbers should
show a disposition to give the Board of Heaith a
 applying for registration, and not wait until
March next It it it our purpose to print the
names of the master plumbers who register, in names of the master plumbers who register, in
the order in which they make applicion.
"Before another year rolls around, we believe


 this city and in other sections of the Peacific
Coast, is of the most aracoly charater ; and we
hold that stringent laws sho
 engagenents with parties who are entirely in-
compenent to oo o any sort of plunking work as it
should be done.

Tug Iron Gipmers or lintels being used in the
construction of the Phelan building, on Market

 They were made by Messrs. J. .R. Sims \&. Son, at
their extensive works on Beale street, nad are said
to be the henviest girdersever made or used onth
 situated
the sual devices in rolled iron.
The carrying capacity of the girders referred
to be then The carrying capacity of the girders referren
to being perapp ten times greater than the
load that will repose upon them, there can be
no
 ing the size of wall-girders or lintels, to increase
dimensions correspondingly with the number of Aimensions ecrresppondingly with the number of
stories to be erectred But in our opinion, the
practice is is an error. We contend-the shan between bearining being equal in either c csese that
the weight upon a girder ceases at the point in wall where tho erown of on anases at described point in
the center point between the bearingsterminates.
t. It would be an exxeedingly poorly-eonstruteted
wall in which a hole of an an given dimension wall in which a hole of any given dimension
might no the cut, without more of the brick
-materia falling than would form a semi-circular
arch





Ives' Burglar-Proof Door Bolt.
Thio. alove ent initusta, thin pertetion to







This cut represents the same features as No.

1. The same sizes of bits are required, only the face plates require a little more time to inserte
Thaese bolts are made in difient styles of finish,
ordinary nickel ordinary nickel, and real brone tres trinmings,
This bolt is intended for use on either inside or




Market Reports.






72
THE CALIFORNIA ARCHITECT AND BULLDING REVIEW.

uilding Intelligence




































Publication Notices.

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$\qquad$









The Cellifoxnia Architect
BUILDING REVIEW.
publ shed monthly ay tur
san Prancisco architecfural publishing co
JAMES E. WOLFE, Editor and Manager
240 Moyrtooxreny Strekr.
GEO. H. WoLfe, Business Manager,
Room 11, 240 Montgomery st.
Sent to any part of the U. S. S. postage faid, at $\$ 2.0$
per annum, wuith extra cost of postage when
sent to Forrign Countris
sent to Forcign Countr
Entered at th9 Post offoe at San Fra




Building Activity.
Although building activities in San Francisioc
have by no means reached a "boom," they however present anans heathached appearance. The entir
fore of force of skilled labor is generally employed, with
ocoasional "worked outl breaks... Firit to active
business prevails in all departments of trade business prevails in all departments of "trade,
and but few are idde who whould not be "expen-
sive hands" at one-half the wages paid

 stitutional dilers, who prefer poverty with rest,
rather than comfort with "too much labor",
are as usual lwasting the thers
are asy usual wasting the hours of precious to
everry industrious.--man, but of no value to the
class referred to.

ing healthul tone to business of all kinds; for
with the employment of the working classes
dealers in all manner of materials and supplies
feel the effect mat
feel the effect
The consum
dur
durin consumption of bricks will be considerable
building hereat future in whe erection of the
bute noticed, to be erected tor
Mriding heretofore noticed, to be ereeted for
Mr. Andrew Mecreary, corner of Pine and Davis
strests Senato Fair's building on Sansoma
Pine
streets; Senator Fair's building on Sansome and
Pine, prepartory to the erection of which the
old " Blumety

the new structure contemploted by Mr. Dean on
Markes street, for which the plans are prepared,
and the tenants of the premises notifict
and the tenants of the premises notified to
leave together with a number of other brick
buildings in course of erection ; all of wlich will

not only enarge the full force of of jounneymenn
bricklayess, but may be delayed for want of sufti-
cient help.


## 

 AN FRANCISCO, AUGUST, 1881.


Pacific Coast Association of Architects. The regular meeting of the association was
held on the 5 th inst. The number present was

 tend, failed to be present. Consequently a res-
olution ans
oe held in inted the the the tutur meenings.
It is earnestly desired

 of interest will then be introdued.
Thise announeement of the deant of Mr. Vitru-
thy fraze the the bereaved wido with. profound sympa-
thy




 tovers in san Jose, and surmount thein wisth
siring electric lights and refletor, upon the
presumption that four or five such lights will


In Memoriam.
It becomes our painful duty to notice the
demise of the late V itruvius Frazee, an honored It beeomes our painful diuty to notiee the
demaise of the late Vitruvius razae, n h honored
and worthy metber of the archite tural profes
sion win this city

 most intimately speak only in his praise as an
inteligent, annest, and oconscientiour gentleman.
His sis sickness was cunsed by exposure to change
 Sacramento Valley where he hed been operatin
in the insurance companies interest, ns civil

 that we have been called upon to chronicle the the
death of brother proessinals in this ity
while
But while such ocurrenees are always surrounded
with. sadness to the living, they bring the re-
pose of eternal rest. to those
 on to life may to any be severed ere another sun-
beam shall break through the eatems sky, orthe
chill of another evening settle around the habitaLemon Juice in Diphtheria.
Lemon Juice in Diphtheria.

Dr. J. R. Page of Baltimore, in the New
York Medical Record, May 7, 1881, invites the York Medical Record, May 7,1881, invites the
attention of the orofession to the topical use of
fresh lemon juiee as a most efficient tmeans for



could wish. -The Mlustrated Scientific News.

74 THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.
THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.

Sanitary Plumbing Laws.
In nó large city in the Union is there less gen-
eral interest taken in regard to sinitary matters cran in teres Granciseo. We have ordinances
than in
and tuunicipal regulations which prodibit and forbid violations of conspicuous sanitry prind
oloses, but these are observed by many morer fro
of ples, but these are oliserved by many more from
te fear of prosection and punishment than
romin a realizizury sense of the consequencos at
 tendant upont their violation. Wraherefor tho
lows shat infrations are inumerabe for tho
who are controlled in their nets only by leg.
 possible to do so without-danger of detection.
Hence the neessity for stringent hytienic laws
and regulations, and efficient menns or their
and
 hand are not sufficient, since they affect only the
lapeger and ture ootorios features in oconection
with sanitary measures ; while beyond these are with sunitary measures ; while beyond these are
other ry reat and grave considerations unafiocted
by any legal restriction or control, and in which 110 other than individual interest, measured by
the understanding, caprice, or ararice of eachl, is the understanding, The lapice, exis will not allow those
tharering acts and exposures which are notoriousl
darin glaring acts and exposures which are notoriously
oftensive to sight and sinelt , but the teins of
thousands of of other means which provee sick
 thousands of the inhlabitants of the Peceitic coast
are sent to utimely
means of sewer gras and defenturure graves by are sent to untimely and premature graves
Ineanis of seever gas snd defective elumbing work,
awaikens not the slightest concern, nor stirs awakens not the slightest concern, nor stirs to
action those who understand the seriounsess o
the fact stated; while in the eastern cities of our
 and
the great questions of sanitary import and advis
ability. No movement of the kinp ability. No movemente ore the thind has ever been
atempted upon this coast, other than such inef
fective fective and ine idental discussions as may have
Cocupied the hour" in deboting olubs or other
restricted comlections. Voices from the toml Teside us, who are so chindierent to vital inter
chidst, ,to arouse ourselves from the lethargy an
stupid ests,
stuid indisferencee that has so long previled
and in sympathy with suffering humanity to us and in sympathy with suffering humanity to use
the wholesonne eneans which nature has provided
to counteract the evils which its deay imposes
 ers, and shall continue to do so, with the hop
that our well- intended firtst will not be wholly Truitess. As a result of discussions in conven
tions, by the seular press, and oless $j$ journals $i$
tother parts of our own ond in foreeign lands, and the clearly demionstrated necessites of the case
New York, Illinois, and other States have passe "plumbing laws,", the object of which is to pro
tetet the heatho of the respectivecommunites,
instituting - execution of plumbing work as will save the
slughter otens of thousands by the foul sewe
rapors which are conveyed into homes and duellin places through imperfect plumboning word. Kuelinu
with any other city in
needs the hest of hy world, San Francis needs the best of hygienic regulations; for, whil
there are less of miasmatio conditions than there are less of miasmatio conditions than
some tother ppaces, the strong wind of summe
act as a powerful agency to foree back the gases Ind the high ele evations of the greater portion
the city causes the sewers to operate as gason ters or retainers of the poisonous vapors; so that
they contain a much laryer volum of gas than
sewers in other cities, where the altititues. of its severs
avenues are less than in this city.
Beside this, there is no other
where meaner and less skillful plumbing woin
is done by a class of beings calling themsel
" practieal plumbers" abers" - a title stolen from t


Better than a Lien Law.
Lien laws are the outgrowth, the necessity
vitalized wy the rancalititer and and dishonesties of those who undertaskeaineontracts ats prioessties below
values, or with the intent to defraud and cheart; and that colas of owners with whom strict hon-
esty $\begin{aligned} & \text { is only contingent; men who are not only } \\ & \text { willing }\end{aligned}$ villing to do wrong thelselves for the sake of
personal gain, but equally so to connive with oth-
rs . in concocting sch

 ment, hewever just the obligation or serious
and severe the consequences of their roguries.
The "better than a lien law" is thise: thati The better than a hien law in in shis: thint
lave be provided which would impose criminal
liabilties upon those who undertake contracts
it les. liabilities upon those who undertake contraat
at less than right values. ehen therery others
are made to suffer loss. A law establisling the doctrine that nien shanl be held to strict account-
aility for their errors of judgment in matters
 teen twentieths of the irregularities which fur-
nish argument in favor of lien law enactunent;
which strike only ar the resulta and leave the cecuse untouched. The danming up of stramans, or
changing their course, has no effect upon th
source from whence they come. The source $o$
 perfect remedy can be applied
which stop shorto t the foun
degree at east
Dise
Dishonesties, are enlargej $\dot{\text { and }}$ and frandulent de
signs shaped in ten thousand forms, because condemnation is spared to those who perpetuate
them. Toleration of wrongs has been the fostering soun and the zephyr breeze that has vital
zed and sustained them, and caused them to be come not only possible without great discredit
to the actors therein, but sometimes to make
them almost fashionable. 0 , it will soon blow ver, has encouraged thousands to make ten
twenty, or fity per cent settlenents with as
uich more in the " reserve fund " laid away fo personal purposes, because it can be done
the law, and without any considerable risk. We hold that every man who engages in
contanting business whether buildigig ho
otherwise, who fails to pay his bills or otherwise, who fails to phy his bills, should
be liable and subjected ot thorough legal inves
tigation with the anterative than unless positiue
corvectness and honesty were shown in the trans


#### Abstract

$\qquad$ he gyminast upon the end of an ope. And if husi   tent of defranding, and there are oceasionally owners to bo found to join in well-laid plans to jecure alvantages and profits through such ar   jaent cities where parties have received con derabbe sums of money on accưt of octract did for the deliberately conceived purposes did for the deliberately conceived purposes   omesteads, pianos, and other expensive lux ies and conveniences, the the expens of reve iors, without being held to any acountabilit. itors, without being held to any accountability These things are repated ith impunity beeause hey furnish a methoo by which men can stea vithout being punished ort the theft. A Alitl trong and effective law-making in this directio rould do more toward purifying the contracting tunosphere than all the lien laws that can be

The Mechanics' Fair, 188 The exlibition of the Mechanics Institute Thir of San Francisco, opened on the 2 d inst air of San Francisoco opened on the 2 d inst with the usual prelisinary exercises, and encour yging prospects of another wriliant suceess with experienced during the first week, that of the exhibitors' tardiness in filling and fitting xhibibitrs' tardiness 'in filling and fiting u their reppective stalls. lit is to be regrette  known a a great many persons refuse to atten the exhibition during the frrst week or ten day heause they know that the display will not because they know that the display will not b full, nor its arrangements completed short full, nor its arrangements completed short that time. Conseauenty the recipts for a least the first week are greatly diminished, ber least the first week are greatly diminished, be cause the send-ofl" lacks commanding inter Whereas if the natre so cause the send-of lacks commanding inter- est. Whereas if the parons of the fair knew that the exhibit would be full and interesting thro the expine woment, it would create an en- from the commencemen thusiasm which would greatly enhance the prathusiasm which would grea tita and finncial resutrs managers and exhibibors.

Large Driving Beirs.-Messrs. T. T. Icke \& Son, of the Heath Leather Works, West BromSon of the Heath Leather Works, West Brom- widh, have uast manuactured two very large machine-made driving leather belts.. One belt is wich, have just manufactured two very larye machine-made driving leather belts. One belt is 469 feet long; 144 in. wide. in. hisk   












## A New Principle in Cast-Iron Girders.


 irregular surfaces. The draft of the pattern-making is
fuller in the mide on eachl piece. Tho make per for the
closing-up part of the lead when the compressive force fuller in the middle on each piece. To make up tor the
closing-up parat of the lead when whe comperssive ofree
was exerted, as well as to straighten the tien rods hen

## 


 cayed piecese to to nter intowingly allowed someme de-
they were therefore both condemned to and
to six they were therefore both condemnee ot o six
months imprisonnent and a fine, while Cordone
and the mason were and
exan

 girder is in front of premises,
where it may be examined.

## 

em a
$\qquad$


FIg. B .
 round cast on the center piece, and the sockeet costont on end
pieces, with thestrut cast on same pieces; this latter rest pieces, with the estrut cast on same piecess; this latter rest
ing on the botomn on the tie-rods. Fig. D shows end of
girder.

$$
\sum^{2}
$$ girder.

At the top of the arch will be seen a space of $1 \ddagger$ inchess Whatever may be the deflection, no part of the arch ex-
cepting the knuckle-joint touch, to that compresion is
only exerted on the line of the
miz

$$
=
$$




I would respentaluly invite discussion of the
igineering faculty respeeting the merits herein

The Presidential Cold-Air Machine.
The apparatus which proved most satisfactory aooling the chamber of the wounded President
tas furnished dy a Mr. Tennings, of Baltimore.
was devised for use in a new proeess of refin


 ent some threed thousand net feet of opart, and ring reprice coil of inch iren pipee, vertical lowereens side of place
filled
whic
fith fine perforations: Into a galvan
 Shen a Low temperature is required.,. This wat
sprayed upo the sheets in the lower tank a
tantly. In each end of the iron chamber an tantyy. In each end of the iron ehamber an
openings thirteen inches guare. To the outer en
this chamber is a pipe connectin
 oor air conductor. To the opposite end is con
feeted asimilar pipe leading intoo ani ioe chambe
tits top, and from the bottom of the same
ipe leads to a small exhaust fan, and from thi Heads to a small exhaust fan, and from the the
the now eold and dry ar ir fircecd direct into
President's room through a flue some twent

 st open the temperature at the Presidents
(twenty-five feet away) is maintained steadily



 ave the room an air of gloom. An extra ice
hamber, fan, and engine has been put up in a
hoom opening into the hall near the first apparoom opening into the hall near the first appar-
tuts, to be used in case of acoident, and to cool
he corriorso r rom sadjoing the Presidents.
hcoentifs A merican

A TruAL took place recently in Rome which
ould be followed by manys similar onesin in other
untries.
$A$ contractor, Cordone, was engaged
 ad engaged two professional scaffold-builders,
arrinaliand Diamantit, ocostruct he ettaging.
hhile the work was ardinali and Diamanti, to construct the staging,
hile the work was oing on, oie worment had
casion to carry a large stone, slung fromi a ecasion to carry a large stone, slung from a
fole along the sacfold, when one of them allowed
ore pole to slip from his shoulder, elting the ep pole to slip from his shoulder, letting the
one fall uon the planks, which ,ave way and
ought the whole struature down killing several
ounh the en. All the parties were arrested and brought
fore the court. Cordone testified in his own
half that he had been in busines forty-seven ehalf that he had been in business forty-seven
years, and had during that time buult more than
oxty large houses, without ever before having years, and had during that time built orore than
oxty large houses, without ever before having
lad to lament teant ancident and many it
lesses confirmed his assertions. The foreman hesses confirmed hiss assertions, and The moryman
of the masons said that the safold was solide and
otrong ; and the scaffold-builders themselves

It was loaded with 117 tons and 1741
pounds of railroad iron over the enght pounds of railroad iron over the length
between the suppors; under this weitht
it deflected at the joints a quarter of an in deffected at the Joints a quarter of an
inch below true aro. The fondation
on which the errder rested setled seiven
inches, so that loading had to be bestopped inches, ao that loading had to be stopped
at the above weight. I have no doubt it
would have carried 225 tons, or until the
Had this been made to sustain 186 tons as as ase loadd, Had this been made to sustain 186 tons as a safe load,
hedraking load being tlive ot imes. greater the same
casting to be useed, but to have three 3 -inch diameter rodsthe breaking load
castingt bo esed,
it would have cost
${ }_{3}^{3080}$ lins. casting as before......


$\begin{array}{r}810010 \\ 87 \\ 88 \\ 950 \\ \hline\end{array}$
$\begin{array}{r}\quad \\ \begin{array}{r}197 \\ 888 \\ 848 \\ \hline 19\end{array} \\ \hline\end{array}$
 of destination and readily put together. By this mode of.
construction, I have found a means to apply for the


Chinese Mechanical Methods. The anvil of the Chinese smith is not flat like
he anvils of other countries, but convex on its


 Jut doubled to present a folded edge at the
of the eleaf and anp printed ourfaceo on either
That of of other lands cylindric. Buare barr
hass is
 ateets of ocopper, in echina, by , buspending thin
hee vapor of of molton tinc.


 he e ity manufacturer competing with his neigh
por in the suburbs These burdens have led to
the present practice of doing the businessin the ditpresent.practice of tuoing the tusiness
In tht the manuraturing in the suburbs.
in spirit Philadelphia factories are

Sely done in Alleghany, Beater Falls, Sharps
(rgy Mckeepspot, etc.
Our city seems specilly fitted as the place


 applies ordered in the evening are on hand next
orning. Many of the best concerrns in the country are
ool located lere on premises which few could atrord to occupy in a metropolitan city. Our
city's product has a most execlent reputation
ibroad, and many of its manufactures lead their respective
Machinist.

Sanitary Uses of Trees
It is generally known that. trees and shrubeath of men and anicacials thrown out in theparate in int
component parts
cimbon and oxygen -give ack the latter to be used over again, and work
ap the former into wood and frutit. Itis also
It the formber into wood and fruit. It. Is als
oming to be enerally understood that forest trees do important service in prompting rain-
falls and in helping to retan the surface water
for springs streams, and general use ails, and in helping to retain the surface water
or springs streams and general use It is also
mown hat certains species planted in malarial loown that certain species planted in malarial lo.
lites hhip to render the later heealh by bome
w using up the deadly miasma. It would

 ors, , and in the same kind of soil, has foumd it
oneeessary to clan it out, while the others had
be cleaned out frequently, An examination
 penetrated - into the vicinity of his seoond or
waste cess pool, were clearly the channels through
which the waste all escaped. Whether it. was which the waste all escaped. Whether it. was
hanged intoplant-food, as is likely, or wasex
haled throunh the leares. in iether case it was
disposed of with equal. safety.-The Leffel Me-
con The German silver of Europe is made by
Combining the material in their metallic oondi
onis its Chinest equivalente by mingling the
ores of the enets
 y cutting or stamping from sheet metal, but
attening wire frost bent into annular form
Pewtev vessels are not cast, but ane shape
ammering upon a block. The primative mil

 a wheel traveling in a groove or channel, has
among western antions, its whelels sunning con
tinuously in a circular track, around a vertical
 center of movement.
Chinase lanterns are not made of horn, lik
hose of the Romans, or of perforated metal, lose orne Romans, or of perforated meeal,
oow since in our oun country, of of glass, as
how universal, but are of varnislee
 orst for the multitude, sometimes of great in
trinsic worth, and blazoned with titles, for the
mand andarins. The domestic industry of othe from the acetic fermentation of the sweet juicees
of fruits; the Chinese, by placing in water the aa poly, the found along the coasts.
Fish cultur


 istence, China drew nothing from other lands
In what ther required she oirinated lal, hho im
itated nothing. Lefefels Mechanical Newos.

A SUGGEstion to our FARMERS,-A A great many
of our exchanges of late have yery well writte our exchanges of late have very well writte
editorials in reegard ot the scarcity of black-wal
Wit
 unft for ordinaryy cultivation. Many a farm might make his land proftrable by setting it oud
or wallut trees, which will never eat their head
off and will yearly increse in walue Skver SEVERAL Chicago manufacturing establish
nents have been compelled durig the past two
onths to advertise for skilled labor. Commo abor is ordinarily plenty, but there can scarcely
be said to be an overabundance of of whily
Silled mechanical labor has been positively killed mechanical labor has been positively in
demand. Drualtsmen have also had their The demand for bound volumes of this journal for 1880 has been such that we
have had 500 additional copies bound, which we will send to any address at the reduced price of $\$ 2.00$ per volume

## Mechanioal Parasites

All mechanical operations are anficted by what
 ful. The world is by no class of its inhabitan
more honored had benefted than by its truly
competent mechianics. It is the skinfur sons on
 forms out of the crude matter and material de-
rived from the worlds great laboratory. IIs is
beyond the possibility of conputataition to estibeyond the possibility of oomputation to esti-
mate the number or value of thing produced
by the hand of man from the metalic deposits
which for ages have remained witlin the secret hy the hand of man from the metallic deposits
which for ages have remined witilit the eseret
chankibers of earthi, and figuras and lanuage fail

 Men worthy the title of "skillful workmen
those who have cultivated and cused the great
tree of mechanics, both practical and scientific tree of mechanics, both practical and scientific,
to grow until helir towering tops have reathed
upintoethereal space, measuring planets, spheres, to grow until their towering tops have reacheed
up intoeothereal ppace, measuringplanests.speres,
and the celestil)
abdes,
 cand perfected by the
skill Iof master worrmen.
 hordes, whom to denominate mechamies in any
fair or right sense would be perversion of terms
a libel upon the mechaneal art Yet the labo
markets of the world are well supplied with this markets of the word are well
class of material, and-every avenue of mechanical operations thronged with such men, ranging
from fanir and toreable workmen down to the
"ummitigated botch,") a class to which the tern "unmitigated botch,", a class to which the tern
mechanical scavengers might consistently be ap. plied. While gems in mechanism may sometimes be
found, the far greater proportion of labor prod
 matured, unskillful spoilers of good materials,
In house -builing upon the pacific o oost, this
lesser neechanical element is largely represented and they generally make suceess of their at
tempts, becusue the generarity of owners and
employers fail to distinguish or appreiate th employers fail to distinguish or appreciate the
differene bietween stillth woorkmonssip and slop
shop substitutions. Consequently the bete
sher shop sutbstitutions. Consequenty, the bebter
classes are demorilized and degraded, by being
brought into competition with this lesser ele
 pplies to alil, exceept a few owners -those who
love of saving and economizing overrides and
 tion of things bears heavily upon the skillt
classes, and stimulates the opposite in th
violations of meehnieal violations of mechanical principles, rules, and
practices, it also weighs heanily upon qualified
architects, who from the cuases mentioned arechitects, who from the ceasess mentioned, have
imposed upon then onerous severe and multi-
plied duties. The ordinary cares and obligations nvolved in planning and superintending the exe
cution of buildings and work is sufticiently ard ous, in wiew of thit epay received, at full rates
but when to this is added the num erous vexa
tions and unpleasant things which grow out tions and unpleasant things which grow out
this demorailized sentinent in reference to
work, and the letting of contracts to infer work, and siteation often becomes almost unen
ment the situr
durable. It is with in the experienee of many of the prominent arehitects sun san Francise
that they have used the hatehet and chisel free in tearing down, or personally compelled the re
moval of miserably defeetive attemptstat work
manship. sso that, between the parasites and unapreciative owners on wen the one orasites, a
skillful meehanics and competent architects
the other, matters mechanical are considerably
Inixed ; with the advantage more in favorof of the
normer, with their respective purposes of mone $y$ ormer, with their respective purp rosese of money- on-
saving ont the one hand and
he other, with skill full mechanisum as the the sacrifice hhe other, with skillfull mechanism as the
upon the altar of avarice and greed.


The New Industrial Exposition.
The New Englma Manufacturers' and Me
chanicss Institute have nearly completed their hanics Institute have nearly conpleted Ave
large exhibition building on Huntington Ave.
Boston, and the frist grand extibition will ope uggust 18th. Various kinds of manufacturin
processes will be fully exemplified on the pren
les, including boot and shoe making (with ove ises, including boot and shoe making (with ove
a hundred machines), paper making, glass mak
ing, carpet weaving, cloth weaving, and lead
 actuters of New. England. The machinery de
partment. includeos 125000 square feet of floo
urface. The whole building is 540 hy 34 flo


Communicated.
The following is from the pen of one who has ecture and practical building in San Francisoo.
the language employed in not concese nor


 easy to reach. Bedrooms can be so placed that
nearly all of them will recoive the first rays of
the rising sun Sitting-rooms chan be located so
Sity
 posed to cold winds or storms. The library can
be in R retired position without being isolated
 coon sid. Few people imagine how far: a well
tilanteded house goes towards making a happ planned house goes towards making a happy
home. Manyy persons give themelves credit
for being aniable and social in their dispositions, for being amiaikle and social in their dispositions,
when in fact it is pribieinaly owing to their
pleasant and agreeable surroundings ; most pleasant and agreeable surroundings ; most
likely uue to the skill of their architect. Plase
lhe same
 they cannot tell what is the matter; ; they oiny
know that their home is not arreable; com
olaints are made of the disorderly condition plants are made of the disorderly condition
the furniture and things in genera) the hus
band, perlhaps, , acusing the wife of carelessne n not keeping the house in. better order; every-
hing seems in the way; the servants are dis satistied and constantly changing; all hand are
querulous and unhapy. Why querulous and unhappy. . Mriaps more unskillful
soone unskill urahitect,per
builder, has undertaken something he knew but builder, has
little about.
Some of our
little about. teme builders, and a few of our archi-
tects, think that if the outsid of the housis
profuselo ornamented, they have necomplished
thei rorousely ornamented, they have aceompino
their purpose, ont being aware, that no amol
of deorration will compensate for a bad plat of decoration will compensate for a a bad plan
Wives, especially, hould see that their hom
are planined so as to suit the requirenents the family so that there will bequirenentris
changesin in
che their mode of ilie, unless it is is


 greeable house, if a well-qualified person is is em-
ployed to oo it Any architect that has stuxied
his profession can very soon find out the habits his profession can very soon find out the habits
and requirements of his lient cans suggest im-
provements, and discourage propositions known


Toughened Glass.
From the results of a large number of experi-
nents. it
is found that the elasticity of toughened glass is more than dooble that of ordinary
glasss, mad that toughened theet bend much
nore readily than ordinary sheets. Single oure readily than ordinary sheets. singl
coghened glass has a reeistance 2.5 times, and
demi-double toughened glass a resistance 3.1






|  |  |
| :---: | :---: |
|  | gag | Anumber of of ox exingese have hatal own













 $\underset{\substack{\text { aning } \\ \text { wilt } \\ \text { will }}}{ }$















## PIONEER WHITE LEAD WORKS.



What is required to institute and carry $\left\lvert\, \begin{gathered}\text { Messrs. Whittier, Fuller \& Co. several }\end{gathered}\right.$ The maintaining of a factory requires
 forces man to the exercise of his endow- They purchased ground on Fremont . It thus gives employment to an Army
ments, to develop them, and give the sub- street, between Howard and stance a form for his appreciation and enjoy- ering a surface of 1376 6-12 $\times 275$ feet, and
ment.
thereon erected factories and sheds, for the The very many natural resources of this $\begin{aligned} & \text { purposes of the business. }\end{aligned}$ Coast are marvelous, and they impress all Their-whole works, machinery, and apinking visitors with the conviction of a
aliances, are on the most approved pans,
reat funture. With but few exceptions, reat future. With but few exceptions, and excel in detail and completeness those
hese wondrous gifts of Nature are at pres. of any other White Lead factory in the nt but mere curiosities, and are spoken of
nd writen of only as such-with prosy
This is essentially a home institution and written of only as such-with prosy This is essentially a home institution,
hheories on their practical value if utilized. from the ground through to the finished To the business man, scientist, or to the product of their mills.
ractical thinker who comes amongst $\mathbf{x}$, whole community of this enterprise to the $t$ is a matter of surprise that our people, who con the the first place, it encourages the de
with their wealth, do not develop these
In topment of our mines, as all the pig lead resources, and build up our coast with a velopment of our mines, as and the pig in working and useful population, instead or
pursuing the selfish course they are now, It thus gives the Miners employment
which is that of the usurer. which is that of the usurer. Our capitalists and business men are As all lead
blind to their own interests, in not in- get the metal,
teresting themselves in the establishment
of manufacturing enterprises, which will se- It thus gives the Smelters employcure for them a certainty of fair returns for their encouragement.
The people of this Coast cannot afford to to $\begin{gathered}\text { The transportation from the producing } \\ \text { points invokes aid of the carriers: }\end{gathered}$
let existing opportunities lie ide pendercy on foreign sources meens our im- It thus gives Teamsters and Trans poverishment. Manufacturring guarantees
the reverse, as it furnishes enployment to, the reverses as it furrishes émployment to, ${ }^{\text {and }}$ A very large quantity of oil is used
and retains amongus, consumers, that tital
quantity in a progressive and permanent quantity in
prosperity.
We have much pleasure, however, in beind able to refer to some notable excep-
tions to the general apathy of our business tions to the general
and moneyed men.
Heading this article will be seen an illusHeading this article will be seen an illus-
tration of the resilts of the energy and
public spirit of one of the leading and piopublic spirit of one of the leading and pio-
neer mercantile firms on the Pacific Coast.

State.
It thus employs the Farmers
All the pots used in corroding-sheds
nade here.
It thus gives employment to the Potteries.

competition design for odd fellows hall, S. F.-John J. Newson, Architect.
COMPETITION DESIGN FOR ODD FELLOWS HALL, S. F.-John J, Newsom, Abchitect:

competition design for odd fellows hall, S. F.-John J. Newsoin, Architect.
COMPETITION DESIGN FOR ODD FELLOWS HALL, S. F.-John J. Newson, Architect.

Our Illustrations.






 urge our friends to help extend the circulation
of this jounnal, as the measures contemplated in
this connection
wil cost us fuliv $\$ 10,000$.
Cuts 2 and are are elevation designs, by John $J$.
 the lot forming the south-western intersection
Market and Severth streetit this sity, This
ing one of the ""counpetititye deseigss." for ing one of the "competitive designs" for the
building named, it may be our pleasure opresent
others in future numbers. But arclititeets in in others in future numbers. But arcliteestsen in
the competition must bear in nind that all draw-

 competition in clarge.
Cuts 4 and 5 represent
 ingroom, kitithen, two clambers, servant's
roon, bath-iom, and excellent eloset and pan-
try convenienices. It is is designed for either city or country adoption; and if adopted for the
latter, side verandas man be added; and if de
sired, by the sirere, by the ounasion of the bay- windowis,
veranda mhy be continued across the front.

The Right to Lateral Support.
The right to lateral support from the aljoining by the lighest court io the tountry. After a
 las been deeided by the House of Lords in the
llaintifis faver. Upon on other question, per
haps, hass there been of late yenrs so great a divis. haps, has there been of late years so greata adivis.
ion of opinion anong the most eminent lawyers.
The case was tried in the summer of 1876 before
 legar right to such hateral support, but thins was
reversed by Chief $J$ ustice Conkburn and Justie
Mellor, while their deeisiso was set aside by
 Las the principle involved, that the House of
Lords consulted with the judges who reeently
Eave their opinions, and in which hhey seeme gave their opinions, and in which they seemed
to be imost equally
judided
jugment
But now, by the the Lord Chancellor, this question is set at rest, and the easement of soupport has
been legily reoggize aandexplined.
binst,
however, be adnuited that there still remain been legally reeognized and expltained. It must,
however, be admitted that there still remann
somen portial point upon which doubt and
difificulties are likely to arise in the future See. some practieal points upon which doubts and
dififuctries are likely toarise in the future See
ing the very complex character of the rights
. Themselves, and the complicated state of fact
ppon which they may often depend, it is is impos
fibe thit sible that one ases should settle everything But
this deoision doosi groat deal in the way of ouv
ing a very puzzling problem ; and, as it affects all ing a very puzzing problem; and, as it affects all
who hary
building, its os results and house-proporerty and with
bonsuunces need to be carefully $\left.\begin{array}{l}\text { consideredt } \\ \text { The materinal }\end{array}\right)$
The material facts upon which the case turne
are such as may happen.any day to anyone con
cerned in
cermed in rebuy happen.any day to anyone con
cenilding upon an old site. Mossrr.
Angus \& Co. are coach-builders of Neweastle-on
Kyne, and in the year $1849-$ which, it will b
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 before every and are sutect and aunhot builder in the the cours
be an avery



 ourt below, and held that both the Conmis
sioners and hieir ootrataors sere equall liable
This they did upon the well-kiown and recel


 responsible for such consequences, even if he ha
intrusted the work to a contractor, and even hetrusted the work to a contractor, and even
he has sued the neessirp precutions in enga.
ing such contractor. It follows from this, tha


 be acquired by over twenty years' uninterrupte
enjoyment for a bilding proved ot have bee
newly erected at the commencement of that
 disprove the acquisition of such rightiont, or to ma ma
it dependent upon some question of evien
which ought to have been submitted to the jur which ought to have been submitted to the jur
We do no propose to follow Lord Selbor



 Bench Division deeided against the plainitiff,
holding that it was practioaly impossible for the
servient owner to prevent the easement from beservient owner to prevent the easement from be-
coming oconlyet. But the Lord Chancellor dis-
posed of the tuestion by laying it down that



The demand for bound volumes of this
journal for 1880 has been such that we
have had 500 additional copies bound which we will send to any address at the

Architectural Competitions.

| REVIEWED FROM A CALIFORNIA | deliberate and intentional maneuverings of preenders, and recognized by the public, "reliable and trustworthy" parties. For it is a lament |
| :---: | :---: |
| ared in |  |
| this journal upon the subject of Competitions, have sufficienty |  |
| 1 Competitions, have suthicienty ${ }^{\text {en }}$ |  |
| y |  |
|  | ${ }_{\text {ag }}$ |
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| experiences and observind the remark, that we are State: preficing with |  |
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| direet knowledge of the underilying principles of |  |
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| titions, mistakes, injustice, and anfair resats, |  |
| affairs of life and business, there exists special |  |
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| combining diversified interests, the rule which |  |
| letely and equitahly compreilends and |  |
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| in securing the adoption of |  |
| architectural competitions. It is an indisput- |  |
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| beensome of them conspicuously so. T |  |
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| her representing t |  |
| city, county, church, or mutual association, as a |  |
| Whole, or any one or more members thereof, |  |
|  | the mind and hands may be mechanically em- |
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| ll right in managina matters satisfac |  |
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| either of which, as a whole or in the main, may |  |
| eferable to the one receiving the fir |  |
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| der, do not think that we are r |  |
| peculative-ideas, |  |
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|  | offer |
| the statements made. And if we should pursue |  |
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THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.

84
THE CALIFORNIA ARCHITECT AND BUILDING REVIEW


## Cuifituix <br> finditut tulo filinin角隹保

 SAN FRANCISCO，SEPTEMBER， 1881

©he Cellifornia grchitect BUILDING REVIEW．
runussme monthiy iv tur
san Prancisco archirgetural publishine co
JAMES E．WOLFE，Editor and Manager， 240 Moxtcoomeris Strakr
GEO．H．Wol．FE，Business，Manager， Room 11,240 Montgomery St．
Sent to any part of the $U$ ．S．，postage paid，at $\$ 2.00$
per annum，with cxtra cost of postage when niun，with cxtra cost of postage whin
sent to Forecign Countries

Entered at th 9 Post Offce at Ban F
advertibine mates．
On outsido of front cover，gna page following Build－ ins In


Present Appearances
No movement of special large importance has
developed since our August issue．But the gen－





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ness＂＂practiced is made apparent．）
old he sink to have brass screv．bottom，hot and
cold water－cock，and brass strainer to the waste．
old water－cock，and brass strainer to the waste．
（Who would dare to say that this is not＂com




as suggested by the＂complete＂＂document，in
staod of tataching to the trap itself，is new，i
not sensible．）
not sensible．）．
＂Cover the proetions of the outside finishee
where required with tin or zinc，properly dresed
and taked．＂
\＆$P$ Put tin flashings around the chimineys，prop
erly chased，stopped，dressed，fastened，and stoppeed
We have egiven all that is said about plumbin
and tin．work，and if there is a man on earth wh



The Refreshing Showers are Falling．


 ate they have omme in plaming numbers







The Steel Square．






 nstructive and valuabl
quare yet published．

No Rats in the Pacific Isles．
It is a remarkable fact that there are no rats tempta have been macie to accimatize the
dents there，as the fesh is uch relishe the Todents there，an the flesh is much relished by
he natives as an article of food，but the eattempts the natives as an article of food，but the attempts
thus far have failed as they invariall die of
consumption． LI＇$^{\prime}$ Union Med．．．（Of course，of
course．） thus far
consump
course．）

A New Principle in Cast-Iron Girders.




$\qquad$

를


 voul in beses diameter, rods in Tie rods are cheap- in your July number, headed, "Better than
$\stackrel{+}{\text { b }}$ a or ; e

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8 .
$$

 your July
Liun Laws,
It seems to


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Apootogrric.- Personal and family illness has
rested heavily upon us during the past two

 State made it so, that or all the statatutes of
ners hhould be held and used solely for the
 strain cansed by the load oast-iron into inirders for long spans, using it compressively in the man
ner or
ner of mploying actirno
resistance of 60 per cent. in excess of having



 tionary rights upon the part of the party receiv-
ing theh, to appropriator apply them to pur-
poses, other than thiose clearly and legitimately poses, other than those clearly and legitimately
with the operation oanling for their payment,
the basis of action would become healthful: It


 that there is no power of restraint to check the
exercise of "inaiienable rights"; but ont so
pleasant on the part of those at whose expense
 such glorious things are enjoyed. And fit were
well that limitso peronan liberty were fixed. so
that men would not always dare to do as they
 please with moneys intrusted to them tor ertein
implied specific. pupposes. And if the law of the
Statee made it imperaive upon those reeiving State made it imperative upon those receiving
contrat moneys op rpeserve the oorrectuss of
heir use and application, there would not be a heir use and application, there would not be a
hinderth part of the failures which do occur.
The rule that men may do as they please with hundreth part of the faiures which do occur.
The rule that men may do athey please wwith
noness received in business transactins, while moneys received in questionable and unestablished,
heir solvency
s. by no means a good one. Better that men
then is by no means a good one. Better that men
siil upon the irist, , rather than multiply unwise
contracat engagaments, and extend and increse ontract esgagements, and extend and ncrease
ndebtness by repeating losses upon sucecsive
and perations, until the "lapping" process
reach no forther, and
submissson to absolute in

Mummy Paint.

## A gentleman passing through Long A Are the ther day peeped into a little shop, and started

 ther day peeped into a little shop, and starteduddenly at the simhtof several dead bodies.
hey had been dead for over 2 ooo years ; the The had been dead for over 2,000 years; they
were mumes. Where did they come from
Trom Thebes. Are more coming? Yes plenty Thom Thebes. Are more coming? Yes, plenty
 refrens-ground up, bones, casing, coverings
pitumen, and all. What for? Why, for paint There seems to be no burnt gienna like ground
nummy. The artists are willing to pay higl mummy. The artists are willing to por pachigh
prices for this mummiy paint.
wallsmaybe limned with the dustof the Poolemies

- London Truth.



## 

Being a History and Deseription of the Square. Methods and rules given by which the length and bevels are ob-
tained of all kinds of rafters, braces, collar beams, brackets, ete. Itt aplicition to the various outs in stanir buidding tained of all kinds of ratters, braces, collar
The whole designed to be e complete elp
problems in regard to the cuts in carpentry.


| ure |
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| of act |
| ond |
| sands |
| sald |

 or sculpture. In the process of developplent, the oconeeption
of the pquare must have bean one ofthe anliest plane fitues,
and have come into use early in various combinations. Men

$\qquad$

[^1]



Arohitectural Competitions.
Number $V$
The article in our Aur $\sqrt{\text { Aust number upon the }}$
subject of architectural competitions, has stimulated considerable comment and inquiry, and
we theve been called upent to anser many quess
tions tions suggested by our plain statementess of facts
some woundering almost to doubting, whether we
We,

 competitions. Statements have been furnished
us, which if put in rint, would fill a whole vol-
ume of this journal, by no means complimentary
und


 granacter, is a mistake. A yood reputation is a
grand acquision and attainment, ,utit by no
means purites and purges men from, nor fortifes
 and impregnate our-poor humanity; and .often
the wisest and best of mankind are sedued int
acts of folly or error, which servest so demonstrate
 While some maintain an unsullied reputation
through life, and pass, down to the grae with
scarce a stain or bbemish, by far the greater

 stand that severe injusticice has frequently been done
and men would
hy mesent with indignity every
intimation calculated to teflect upon or call in question their unimimpeachable integrity. As we
have hereofore stated, such acts are not alumy
he result of deliberarate purposes, but the offsprin
 realization of the rightrof contessting parties in
compentitive issues. The sentiment is oo often
indulged in, that an architect's work, as exem
 amore than contingent considerations, and subujec
to any disposit that the inconisiderate and unapp
preciative many see fit to decree. The fact that to any disposal that the inconsiderate and unap
preceiative many see fit to deree. The fact that
plans-however meritorious or insignifinat the may be-are the result of intense study an
earnest brain and hand work , some eneve
appears ; and rude and unmerited rejection hav appears; and rude and unmerited rejection hav
in thousands of instances been extended, where
respectult consideration. and appreciation haa been deserved. This is. one of the phecivon point
of the issue upon which injusteo has turned
othe sue Those who produce the least meritorious plai
often toil and labor hhrdest, stimulated in thei
fruitless efforts by hopes of successs ; and it but little ess esking plans by competition to thro
 try, for while sucoess may bring joy to th
heart of the suceosstu, defeat senditits arrowo
disappoinment deep into others, causing tenfold
more injury than beneft. Competitions, as generally conducted, are bu
little less than practical. - ishonosty, and are
intended
 much the dishonest feature may be repudiated
or denied. Not o criminal dishonesty which
proven, would subject those guilty of ft ol olegat punishment; but one of moral turpitude, to
Whih no penilty attaches. We hold that every
act of deoeption hat misrepresentan, it mat





##   conean 

How a Doctor is Created.
Quu. Quid est creare? (What is creating?),
Ans. E nihilo facere." (To make out of nothing,
Re
(erem
$-{ }^{2}$

An tong hide great quationo of tho period


 est and diligent effort on the part of those who
comprehend the situation, the enforcement gravities, and their inseparable connection with
human life and happiness.
The interest in this connection at present is world-wide in its scope; our own country being
in the lead from natural causes, brought about mainly from rapid spread and growth, and the
self-reliant disposition of the masses who
thrown upon their own resources in building u


 of after consequences. Hence the privy -vault
nd well were generally located in near proxim
ty, with on attention paid to the character o
the stratification existing between the two poe nt of location, and a general violation of all
rules recognized at the present time as of indus.
 Sugineer are sufficiently full of int
nit reproduction in our columns. The following extract from the July report of the Hear is culpable neglect of sanitary super
thin in that thriving little city. The off coals
is
 quently we find dwelling -houses located within
twenty feet of privy-valts of the most offensive
nature, without the slightest effort at ventila in. There
his of one very yotalt in example ont th i



The Brooklyn master-plumbers contemplate
can ling meeting to discuss she new law pase
by the State Legislature conferring supervisor by the State Legislature conferring supervisor
powers on the Board of Health in the matter plumbing and drainage. Dr. Hammond, Sani-
tory Superintendent says that every decent
plumber would appreciate the new law. The only people who oppreisie it it are builders of past
board houses and plumbers who do cheap an
 will be freed from dishonest to do openest work
intelligent enforcement of the new law. In the
亚 this
 $\qquad$

## And I agree to comply with the rules and regu- nations that are and shall front time to time be abolished by the said Board of Health. established by the said Bo (Signature). In his annual statement, Dr. Sykes of $M$ brought, England, ,avs that a considerable o peak of typhoid fever occurred in June,     

 Sanitary Items. The cry of warning seems to come from all ane to defective plumbing work and imperfectsewerage. In this connection, the . White







 peated in this journal-that thousands are yean
consigned to untimely graves though imperf
plumbing-they will begin to apply the adv plumbing- they will begin to apply the adv
so frequently volunteered by sanitary journal
and intrust their work only
at those
family with the correct science of plumbing, and why
possess the integrity to perform work with a fun appreciation of the serious involvements assoil
pied with this department of mechanical ope

 cause, not even personal uncleanliness, have doc-
tors profited more than from the results of bad plumbing work.

Railroad cartwheels are now kept in their
lace without being keyed on. In former times they were almost sure to precipitate an accident
besides, keys would drop out by the cont
jar, and be weakened by the axle and whet



 in which
News.


## PIONEER WHITE LEAD WORKS.



[^2]




THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.

| History of Fireproof Safes. |  |  |
| :---: | :---: | :---: |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| er of Paris. Ho found that it was almost |  |  |
| oncluded that plaster of Paris, therefore, was a great non-conducter of heat. In relating his experience to several, there probably was among |  |  |
|  |  |  |
| experience to several, theee ped the idea of apply- hem some one who conceived |  |  |
|  |  |  |
|  |  |  |
| place until about fifteen years ago, when it was enerally given up. The reason for abandoning |  |  |
|  |  |  |
| generaly y given nup. the use of plaster is thus fiven: It was used, not |  |  |
| in its dry state, but ming.edlowed to set after being poured in between the |  |  |
|  |  |  |
| loweel to set atter being poured casings. This filling, it was found, attracted |  |  |
| duced oxidation of the metal in contact, or formed sulphuric acid, of strength enough to |  |  |
|  |  |  |
| formed sulphuric acid, of strengchemnon thing |  |  |
| to find old safes that were filled in this way, with holes eaten through their panels. When it |  |  |
| holes eaten through their panels. roding the metal, it was thought that dry plaster might do ; but, though a poor conductor of heat, |  |  |
|  |  |  |
| it was found defective in having no water <br> off, and alum, which contained a large percent <br> age of water, was mixed with it, and found to |  |  |
|  |  |  |
| Answer the purpose very wel before the use ofSome twenty years' ago, |  |  |
|  |  |  |
| plaster as a filling was abandoned, the use of hydraulics and other cements was commenced. |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
| will absorb one-third to one-half their volume of water, while there is a kind used which, it is said, will absorb an equal volume of water |  |  |
|  |  |  |
| that is, a barrel of cement will absorb a wher. Cement, at the present time, seems to be the favorite filling with most safe-makers, and it is |  |  |
|  |  |  |
| found not to corrode the iron, on account of the alkali which is in it, which has a preservative |  |  |
|  |  |  |
|  |  |  |
| mix in sand whicht ittores to an extent, its non-conducting properties. Asbestos has been used, but was found to |  |  |
|  |  |  |
| be not a good non-conductor, and was soon abandoned |  |  |
| About twenty years ago a Boston man took out a patent to line safe doors. and flanges with anstone but in practice it was found that, in |  |  |
|  |  |  |
| long-continued fire, the soapstone heated to a very high temperature and retained 1860 heat, so that it in turn was abandoned. In 1860 a patent |  |  |
|  |  |  |
| was taken out for the attachment of the plaster |  |  |
| that in shrinking, its diminished size will not permit its falling from its place; patents were also taken out for the use, for filling, of pure |  |  |
|  |  |  |
|  |  |  |
| phate of iron mixed with plaster of Paris. In 1863 the following patents were taken out: For |  |  |
|  |  |  |
| tight casings, one-within the other, and with the |  |  |
| of generating steam under high heat, the |  |  |
|  |  |  |
| to permit the exit of thaster of Paris set with a |  |  |
| npound of calcined and powered gypsum and |  |  |
|  |  |  |
|  |  |  |

anum in pieces imbedded in the plaster in such
relative proportions that the water of crystalh
zation in the alum evolved by heat shall set the

THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.






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 holm ;coest, about $520,000$.

## 



## 
























## 

NUMBER 10.$\}$
Chit Culifuruia Auchitect

## BUILDING REVIEW

## 

san prancisco architectural publishing



| Sides in | he Manufacturing Interests of the United States. | Architects' Fees. |
| :---: | :---: | :---: |
| discords in any connection. Life, at best, | The United States produces nearly all the | tion, revised and enlarged, Printed Form of Spe- |
| of bitterness, and everything which tends to | flannels, blankets, and carpets we use; nine- |  |
| ners of real estate are not generally rog | tenths of the woolen shaws, fancy cassimeres, suitings, coatings and hosiery we wear; two-- | Sta |
| cheats, nor are mechanics, as a whole | thir | OLSE |
| ee main, dishonest swindlers and villains. |  | In common use among architects of the United |
| the course of things in connection with the bu | fou | States. |
| ing busiiness | people. Not one American in twenty but is elad | Full profession |
| nels which h |  |  |
| , this to be regretted state of feeling. | hat, linen, and fannels, his watch, his knife, his | win |
| red | Con |  |
|  |  |  |
| tas | The foregoing is but a limited encompassment |  |
| band of base and uureliable inen. |  | for the drawings, and 3 per cent. additional for |
| y be in part justified. Because one |  |  |
| please= upon another, that fact is not a | enjoying the blessings of this great land |  |
| tifertion for universal condemation |  | For decorative work, monuments, furniture, |
|  |  |  |
| tenth may be as pure as it is p | woods, and fabrics of every texture and kind, | l |
| ned beeause even a majority are bad, then |  | ey. |
| to suffer. But many |  |  |
|  |  |  |
| ing parties, and often, where only slight | countries; and in many, reached beyond and | S |
| ation exists, mountains are reared, and |  |  |
|  |  | Time spent in visiting parties out of town, at |
| lin like manner, many me |  | their request, whether commissions are finally |
| eneral prineiples, and | surpassing them in in inumerabie connect | $\xrightarrow{\text { given or }}$ If the |
| consider it a rightful and justified privilege to |  |  |
|  | From pins and needles, and children's toys, up |  |
| do they hesitate to perpetrate any s |  |  |
|  |  | Fees are suceessively due as the work is com- |
| over deceptionis practiced. All this is | and other purposes; tools and implements of in- | pleted in the order of the above ellassifications. |
| g , and should not be. All mankind are |  |  |
|  |  |  |
| cool deliberation control the mind and | genus, that the Old Worrld is foreed to acknowl- | E |
| art, and passion and excited | been developed by the indomitable mind-powers | (If the foregoing, or some other compensating |
|  |  |  |
| ental and moral element is | in |  |
| of the moment | One which points to the fact, that the free and |  |
|  |  |  |
|  |  |  |
|  |  |  |
| $\begin{aligned} & \text { ry shadows over } \\ & \text { dreary pathways. } \end{aligned}$ | archical, and imperial countries of Europe. The |  |
|  | ernment, may be, and sometimes doubtless are, | remuneration. - Ed.) |
| The Largest Arch. |  |  |
| cording to the Scientifc American, this | there can be no successful denial, that w | A Novel Architectural Design. |
| try possesses the largest masonry arch in | trammels and restraints are removed, and the | A building of novel design, intended for a |
|  |  |  |
| st important engin | measurable benefits follow. It is the inthrall- |  |
| hington it supplied with water. The arch |  | ni- |
|  | our race to the level of the brute creation; or | er |
| t of the arch is 101 feet, and the width | worse, because instinct and passions are strong |  |
| he structure 20 feet. The arch forms an arc |  | pld-be diners |
| a circle, having a radius of $1,342,852$ feet. | must prodice debasements in numerous forms, | nk |
| (unlike all other works of the kind) did | and impose conditions upon which the cultured |  |
| settle, the keystone having been set in win- | ${ }^{\text {and refined }}$ row and sym | - |
| the center struck in the summer. The |  |  |
| the Chester arch across the River Dee, at Ches- | So much building is going on in $P$ |  |
| land, with a span of 200 feet; the fa- nter arch of the new London bride over | ing purposes is entirely exhausted, and no iron |  |
| Thames, with a span of 152 feet ; Pont-y- | of this description is to be had for love or mon- |  |
| the Taff, in Wales, 140 feet; the the Seine at Neuill, France, with |  |  |
| 128 feet ; the nine span | mal of IT |  |
| briage, London, each 120 fee |  |  |
| ted marble Rialto | this journal for |  |
| ourna |  |  |




## Distemper.



## PIONEER WHITE LEAD WORKS.



What is required to institute and | and |
| :--- | :--- | :--- | Natcere is generous with her gifts; but she White Lead in this city. lab labores: ments, to develop them, and give the sub- strect, between Howard and Folsom, cov- It thus gives employment to an Army stance a form for his appreciation and enjoy- ering a suirface of $1376-12 \times 275$ feet, and

thereon erected fent.
ment.
 Coast are marvelous, and they impress all $\begin{aligned} & \text { Their whole works, machiniery, and ap- } \\ & \text { thinking visitors with the conviction of a pliances, are on the most approved plans, }\end{aligned}$, great future. With but few exceptions, and excel in detail and completeness those
these wondrons these wondrous gifts of Nature are at pres- of any other-White Lead factory in the
ent but mereceuriosities, and are spoken of
and written of only as such-with prosy
 To the business iman, scientist, or to the
practical thinker who comes anongst us,
Few of the rear mills. it is a matter of surprise that our people, with their- wealth, do not develop these In the first place, it encourages the deresources, and build up our coast with a velopment of our mines, as all the pig lead
working and useful population, instead of used is the vroduction of our own coast. pursuing the selfish course they are now, It thus gives the Miners employment.
which is that of the usurer. Our capitalists and business, men are. As all lead ores have to be smelted to
blind to thcir own interests, in not in- get the metal, teresting themselves in the establishment thus gives the Smelters employ cure for them a certainty of fair returns for their encouragement.
The people of this Coast cannot afford to The transjortation from the producing let existing opportanities lie idle, as a de-
pendency on foreign sources means our im- It thus gives Teamsters and Trans poverishment. Manufacturing guarantees
the reverse, as it furnishes employment to, the reverse, as it furrishes employment to
and retains among us, consumers, that vita and retains among us, consumers, that vital prosperity.
We have much pleasure, however, in being able to refer to some notable exceptions to the general apathy of our business
and moneyed men. and moneyed men.
Heading this article will be seen an illustration of the results of ehe energy and
public spirit of one of the leading and pio-
neer mercantile firms on the Pacific Coast.
$\qquad$
A the gringne quantity of olle lead. All this
il is crushed from seed raised in this
It thus employs the Farmers
It thus employs the Farmers. All the pots used in corroding-sheds are
It thus gives employment to the es employn
Potteries.




The Best White Lead Among the several brands of No. 1 white
lead, none ranks higher on this soast and de-




 luction, and of as yod quality as the very best
produced in either the United states or England,
should secure its universal use in Colifionina, at


Better Times Ahead IFrom Magee's Real Etatat Circular.)
"If one were to oughe y the numberand value
of real estate sales unade in September, the conof real estate sales made in theptember, ten a very
clusion would be reanhed that tith. had been a
dull nonoth in land transiotions.
But the facts dull month in land transactions. . But the fait
reveal a difierent state of things. Last moothh
was really one of the best moonths, both for ac tual sales and active inquiry, as especially bee
known for several years. It was en markable and hoppeful in this, that arvaine
were offiered for a larger number of properties

 at lower rates than those inow asked. Thise is
cheering it must be admittec. We. note, too
cor the
 ment the preference. We Would like to cal
owners'
outention to the fact, that the present is
not $a$ god time to fore
 inside, paying, well-improved busiuess property.
There iory litlo of such property for sale
The total inumber of sales mades made in September was 192 ; value, 8625,685
 years, or any one who engates next ten yearring to
here, is more likely within the nexin
make make money than at any time within the past
twenty yearas. The state is bound to go aheadd
very f fast for the very fast for the next five or seven years
We are to have hlue times and depression no
longer. The signs all point to better times. The progress made in manufacturing, frut, and
grape growing catle and shoer rasing and
above all, in railroad building, will astong, and the most sangriine within the next fextons evers
Hundreds of investments and openings in both - iity and country, now neglected and despised
will soon be sen to have hat very large profts
oin them. We repeat now, what we have more in them. se repear now, what we hive nore
than onee said beore, that if capital is not safe
in this sity and State, we doubt that it can be
 upon our street railroads, properly praising the
Cailifornia and Geary treet cable lines for thein almost elegant carrages and dummies, and the
creditate management of the roads. The Sut
ter street line is mentioned as one of the enith construction of the road way is concerned. Thi
is true. It was buit by a man possessed o
In


 happens to be transfer car, when one one strangsel
traveling public.

The New Yowk Bundive Law, reeently
signed by the Governor of that State, is before
G. The "text") ocoupyying eight column


 or put
or
after
anter if
necessa
 In other words, the Building Department has
the same power...hich hit Baor of Heath has
weilded in providing for the sanitary health of
the city."
 important particulars; but it seems to be imposs
sible to get tithorughl efficient law through
an Albany legislature. Still, every anendment is for the betere",
One of the rovisions is in reference to dwel
ling-houses "cone hundred feet in hight, and


 sions in this Jourxar; but it provides the text
for the framing of a lav by omme future Califor-
nia legishature whenever it shall be posible to nia legilature, whenevere it shall be possible th
have assenbled at Sacranento body of intell
gent, practical-minded men as law makers, whe
 tance than schemes for personal aggrandizement
and proft, with considerable " public plunder"
thrown in. and pront,
throw in
We hope good, espesible, time par pratical bar building law, and
plumbing and and sanitry
pry thumbing and sanitary laws will be enacted in
this state. They are all greatly needed and
cannot be toy cannot be too soon created. San Francedso con
boost many elegant and substantial buildings
within its limits but it must be contessed that within its limits; but it must be confessed that
there are many fearul shans-buildings, in the
erection of which the economies erection of which the economies have been whit-
tled down to their finest poont, without muld re
gard to permaneney or security. Consequently,

 ordinances which propose to.
and mamers of construction yovern methods and manmers of construction;
but in effect they arealmost entirely inopera-
ative. Scarce an architect in in San Francisco




 been nullitied or compromised in such cases, an
the partios alowed to proeed, except such
have been obstinately unwilling to make con

 derstand the correet prineiples. and science of
construction, and a supervising board or orm-
mission to enforce complinice mission to onforce eompliance with suen-provev-
sion an might be established by a wise, judicious,
and practical luilding law. and practical luilding law. laws away, before the
MMany gitions pased away
necessities for such a law becane apparent in
 be substituted for yenerations when the "Gold-
en State" will have enated one of the best and
most practioal huilding laws in existence.

## The Lumber Question.

At no very distant day the growing seareity
of hunuber will ead to a much wider use of rion
lis steel. Iron could now be proftably weed and steel. Iron could now be proftably used
where lumber is, toa larese degree, but bund
ance and present cheapness are the lame excusMhere lumber is, to a large degree, but abuind
ane and present cheapness are the lame excus-
es for a savage destruction of the mighty fores for a savage destruction of the mighty for-
ests, which, when once gone; are virtually gone
forever. forever.
At no time in our history has there been such
e enormous consumption of lumber. During

 his coming season will reach seven and ab halt
fillons. The anailable supply in those States
eighly-one and a halt billions fert eighty-one and a a half
welve yilions feers' stock. or a
Michigan lumber has been twelve yearss stock. Michisan. lumber has been
Sinped to Mane, showing the resources of that
State are almost exhausted. Southern pine is State are almost exhausted. Southern pine is
adrancing, supplies of spruce are ititht A gen-
eral advane in lumber is thought extrenely


 price, and iron and steel 1must as necessarily de
crease in cost, untill, at al atst a meteting place will
be reached, which will stimulate the application
 endurance, safety, beauty, and eoonomy, iro
nust sooner or later drive lumber out of active ompetition, and thus open up a far wider de
mand of the products so founderies and mills.
Jourral of Industry. A xew ballot box has just been submitted to
the French government.
It has two locks, eacl pening with a different key, and an apparatue
which clips stub or corner from the ticket de posited by the elector, and drops the stub into
one part of. the box, the ticket going into the
 of tickets. clipped. The ballots must agree
number with the stubs, and both with the "tell tale,", and the voter sees for himself that hi
ballot has been acast and taken acoount of. Lef
fel Mechanical Neus.

THE CALIFORNIA ARCHITECT AND BUILDING REVIEW


modify,
position
petitions.
Numer
attempts
unempts at fairness, and purpoeses to arwoid in
justice to competitors have appeared, but it nearrecty impossible to that ittain tis sate to to assert that absition
peright, just, and equitable procedures seld right, Just, and equitable procedures seldon
ocur.
We will refer to a a case of present or reeen
occurrence directly in point, in which the com Ist inst. In this case, advertisements. were in
serted in one or more class journals of lar
large circulation, by which means the invitatio ocompete were extended to every State in th
Union, and presumably, ot every city and tow of any importance, in, fact, every architect
the United States was invited to join in th
contest.. The case referred to is that of the "Watkin
Institute Builing." The advertisement read
in part as iollows." "Designs tor a block

 of stores four stories high, with tower add
tional."
"II separate building, 75 feet by 112 feet, intend
for ilibrary and reading-room on ffrst tloor, an
public hall and lecture-room on socond flo

plans or eamber sofy front eleavation and soections
traverse and longitudinal drawings, sufficient t
"The elpans cocopted by the commission
de retained, and all thers to be subject to tle casualities of loss or destruction, to be re
turned opon the reupest of their authors, prou
vided they have been enclosed in mental or strons
paper four inches in diameter. ing all the buildings, not to exxeed 880,000 ",
For all this the
the commission" propose ot pay
thagificent sum of $\$ 300$ for the best plan,
 iectural profession of the e nited States. $Y$ Y
it is but little in excess of numerous others cannot believe that any qualifed architect, no
enjoying special understandings with the co mission, ,will give or has siven countenance
anyything or orenant with unfurness as con
plying with the invitation to The probabilities are, that the gentlemen in
terested in the mattor are intelligent and jus
nen in their special positions and callings men in their special positions and callings
lifen, but they have certainl undertake,
Connection with the ""Watkin's Institute" something far beyond their capacities in fair an
equitable dealys.
tst. The limito $\$ 80,000$ is too small, judg by any standard of building values known to us,
provided good materials, substantial construce
tion, fair workmanship, and skilltul architectuc 2nd. The compensation offered amounts to
but little more than ane third of one per cent. for
No. 1, about one sixth of one per cent. for No. 2 ,

THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.


A Useful Plumb Rule.
Get a good piece of board, alittle larger than
may be eesired, and strike e circle on its face at
each end, taking care that they are both struck













Tre demand for bound volumes of this
journal for 1880 has been such that we
have had 500 add tion have had 50 additional copies bound,
which we will send to any address at the
reduced price of $\$ 2.00$ per volume.

Market Reports.




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THE CALIFORNIA ARCHITECT AND BUILDING REVIEW


Tht CCuliforuia Axchitect


BUILDING REVIEW
ruansmato monthiy av rium
tho was held on the tht ineeting, of of this assoc SAN FRANCISCO ARCHITPCCTURAL PUBLISHING CO ${ }^{\text {at any }}$ previous meeting sinnee the organization
JAMES E. WOLFE, Editor and Manager

240 Montconxrry Smazr.
GEO. H. WoLFE, Business Manager Room 11 , 240 Montiómery 8 t.
Sent to any. part of the U. S., postage paid, at $\$ 2$ per annum, with extra cost of fostage when
semt to Forcien Countries.

Entered at ths Post Offoo at san Francisco, Cal as sooond-class matter.



A Word To Our Patrons.
We are exceedingly anxious to make
juornal all that we intend it shall be. To to end, we renew our eannest requast thiat each
our readers lend the helping our readers lend the helping hand. A Alit
personal effort on the eart of each will sur
add one or more new, for each present, sulu scriber to our list. This result will be ${ }^{\text {a }}$ a gin
and benefit to ech and all
the increase of subscriptions wiur weraders, the increase of subscriptions will enablers us the
soonerto complete contempled inprovent
and make this the stand
 reputation and standing among the journals
the eastern States and Europe, and its influenc
for
 destined to be large. We have worked
way upparar under great disadvantages and
thay ace of conditions generally which wo
have caused timid
 it was not until all the probabilities and possi
bilities were fully considered, that the resol
was made to venture upon the diffitultt task

 actor. And now that the mountain has bee
scaled, and the mastery gained over obstacle
which at the begisnning seemed almost insur.

 had the effect of creating the sitil Ir reaterter elesire
that thousands more may add their subseritions that thousands more may add their subseriptions
and soo make manifest to the world, that while
California leads in innumerable connection, it


 of being made a power for good both toanabhi
tetets and the public at orge, here can be io
question
 ontracted senses can be enlarged into a b boade
and more generous and liberal spinit, the bette
it will be for the honor and dignity of the pro
more enlarged, ying within the , grasp of those the
who combine with honest intent to mprove
themselves by uniting with kindred minds in



ural services
The followin
nembers of the



wha appointed to examine the same, and submit
the eresult of their investigation at the next reg
ular meeting.

$\qquad$

definite action may be expected for the purpose
of ffecting such an organizatio
The
The fact being started thation the managers of the



presented at the next regular; theetings, and the beir
respective eriristadjudged and determined, and
the awards made by the association
 teem and appreciation in which our humblo ef-
forrs. to establish $a$ journal in the interest of the architectural profession on this coast is held by
the members of the association.

## Signature Hieroglyphics.

Many amusing stories are told, even of learined
 heir own pents, exceept bometimes mentrocuceed by
of what they intended to communions
ont by no means uncommon to see name. And sub-
sribed to misives which ore ore like the org
ms and hieroggyphics of the ancients, than


 half of his time in striving to reduce the pen or
pencil saratehes before hin to plain English
yould be more than human if he did not do a tle profane thinking, even if he restranied his
Snuaf from expressing the emotion of his tor-
red soul; and editors, to ured soul, and editors, too, if they were not
ue motet patient of human kind, would echo he
sefrain from the compositor's rooms over some the manuscripts received
Tons of manuscript have
 money with oditions and compositiors, as well 1 as
other people, and it is reasonable to expect that ter people, and it is reasonable to expect that
requiniations whic hour to
rake out") the true intent and meaning of make out", the true intent and meaning of
xty minutes sriting, should meet the waste ske finte.
Ail fuis we write, because subscriptions
his journrl have poured in upon us os rapidl this journrl have poured in upon us so rapidly
of tate, and among them hhere have been somany
names subscired which requrrd the ful corps
of this office from the mequin the of this oftice, from the , managing editor down to
the "' printer's devil")
to decipher the signa-


Two-cent Stamps.
We would particularly call: the attention
those sending us stamps, either for those sending us stamps, either for copies.
the Cantroria Arcitect and buideXG REVIEW, or for the payment of books,
o send us the amount in TWO-CENT dimps. We have now a plethora of three re stamps of the smaller denomination, her ONE or Two cent.
In San Francisco, with the houses nearly all
ff wood, and with a population of 233,000 , the



and

d
. ${ }^{2}$ ,

$\qquad$


$\qquad$ . | wh |
| :--- |
| hu |

 should the present holders maintain their gras,
too long, the old relentless messenger, who

| have the opportunity to divide the spoils left |
| :--- |
| them by avariciouspreemptors and firs setl\|ere |
| Naturall |



 masters of the situations, and command an indu-
eneceand business powerbefore whioh all present
condition in mañ
must yield. conditions in manufacture, trađe, and commerce
mustyinild
This on fancy foreboding of improbable re-
sults, but the solid facts presented and clearly sults, but the solid facts presented and clearly
deducuibe from what we of Ciliforini have to
our sorrow learned during the past thrty years. our sorrow learned during the past thrty years.
Tenso thlounds of ur orn race have been
driven away from this State and coast, and every drven away srom this business has been injured
brancla and spherof
by the people whose further ocming to the eteby the people whose further coming, to the det-
riment of a better class of immingration, we en-
phatieally denounce a a great wrong against the platioally denounce as a areat wrong against the
peotile of this wester nection ans well
entite white population of the United
United States.

## How Forests Produce Moisture.

\section*{| Dr. Franklin B. Hough, United States Conl |
| :--- |
| missioner of Forestry, gives the following expla |} missioner of Forestry, gives the following expla

nation of the effets of forest on onoisture 1 It is
It a matter of common reemart, that oure stream
dimininh as the woodlands are cleared away, so

 Many streams once navigable are now entirel
worthless for this use. The mode in which this
influence operates will be readil undertoo
red



 The air being thus charged with moisture and
cooled does not take up by evaporation the
crains which fanl, and the soil, being more open readily allows the water from melting soows and
from showers of sink intothe aerth, rrom whence
a portion appears in in springs and in swom sways the powers of death, respecting neither
conditions $\begin{aligned} & \text { nor } \\ & \text { bonssesions, wil disisolve the } \\ & \text { bands of life, so that heirs and liitgants shall }\end{aligned}$
portion appears in springs and
which give rise to rills
The air atreams all times holds more or tained of all kinds of rafters; braces, collar-l
The whole deisined to be aomplete elp to
problems in regard to the cuts in carpentry.

"The Sand-Hill Rangers." Such is thie designation applied to that class of
prietending ine chanics in the region of San Francisco, who are as ignorant of allitrue and ocrreè mechanical principles, as the braying ass is on
tho e sanctity of the Sabatho or the saredunses of
holy edifices devoted to the worship of the Most holy edifices devoted to the worship of the Most
High TCilionoria hans been more cursed than
any other place on earth, by the intictions

 people of EEypt recoverere from thenr scorge
and slould similar visitation or other calaniniee
come


 if the other class of simaller vermin mentioned
in the list of th seven plagues should swarm
upon mankind, the comb manufactories of the
 thit ca statets toilet implementst to free the land
But thetoothaso of creatures
Bnown as sand-lil angers, which swarm and settle in all places, $t$ t
hhe commmon ingury of worthy mechanics and
and stisans, must be tolerated as legitimate evils,
njoying certain personal " inalienable
rights,
 striction of which there exists no legal state or
national enach ment nor
ness or mor moral equities, however hurdrtful and and in-
nes. urious the eourse pursued by such parties may e to men who have qual
dhanics, and deserve encouragment and protec ion against all hurtul influences. The sume

 lect, are coarse and rude in every thought an onnception, have horer passed through any Tor mechanicall mastery in any line of operations assume the e character of competing or master
mechanic, it it deliurailizing in the extrenee
Competent men very justly complian that the re often brought in competition with this less
class, and most naturally denounce the unequa disposition of ownerst to countenance and encourHe those who enjoy no other recommendatio y whicl so many have, from theapne to to time, bee than a fair value inust neesesarily, and do, seek every advantage to save themselves, without
any regard the the charactor of the thing pro-
duce.. And in men who are strangers to the ennobling inspirations of mechanitual pride, all th
better sentiments are
Isti.in the -desire and d
 cure their own safety. Hence, owners who
engage such mentsimply upo the basis of low
figures, are guilty of an indiscretion which show
. lack of wise discrimination and judgment ; fo
the same rules of values which applies to chea goods and merchandist atta ahes with equal for
to mechanical productions and operations
The effect of all this is most Injurious in very broad sense-far too broad to be compre
hended in a single article in this journal, unle every column shoolld b bocounied, and then the
whole story could not be told.

many directions would be necessary; changes of
mengaged in mechanical pursuits will continue e
pole


 het, and mecthanics only in pretenses, the orea
 nent of a asytem which would discriminate be
tween the value of the services of the competent tween the value of the services of the compotent
and the incompetent the roformation of the
mon who evote thir time and baser enegies
to the injury of all mechanieal arts and sciences n ineryy connection; the eleavation of mechaniecal
pursuits to that higher plain of operations wlich

 nss. But as all this, or any part thereof cat
tion.
inly be effected by touching

 worship, and the idol before which they bow
and that wlich proposes o diminh ones bank
acount or cashi on lhand, beyond unuroidab neessities, at once produces a a antagonisn
within thesadm of imposebibitiequan

## Individual Advancement of Mechanics.

While an honest difference of opinion may
exist between those who pay and those who re ceive ewgeen therese io who pay pant and uponese who ree the
nore thoughtful of both classes are ayred the Inore thoughtulu of both classes are agreed, and
that ist theimpactionility or or mere than that,
the impossibility, of giving to each ind ivid

 perience, and a a god many expressions from the
class, elead to the belief that they appreciate eve
 The classing, for instance, of a certain numbe
of nen no manhinisiss and consequently entiling
then to so many dollars and cents in the w them to so many dollars and cents in the way
of wages, has too nuwh of the old patriarchal
economy abot it to suit the thimest and the
matter is not particularly bettered by dividing a
 chanic have, or ought to have, a value as dis-
tinct as his own individuality, and should be paid Ior without the slightest referenee to anything
else. Nothing olse will bring out all there is in
anan, and nothing is more neeeded to the
 towards leveling them in respect to ability. In
a orrd of dolara and contst these erpresenta-
tives of somethin to be bough with them are the great incentive to action, and when you
make it manifest to the indiviual that pains-
king on his part will not put him in taking on hisis art will not put him in possession
of nore of thent, that incentive is lost.
It it notaral and and and every way commendable, hat a man should endearor to earn and reccive
ns much in the way of wates as possible, but mprovement in this respect, as in every other,
requires exertion; in the acas of the mechanic,
or instance, an exertion in the way of study


what are mechanical purnarsuits will continue
perintentents, forement etion to proprietors
termed work
 ot, imply that they know less of the business of
heir radee but befre the proper incentive to
ction can be offered to
 gics, it must be evident to them, that, in lift-
chemestves up, they are not to be dragged an thy others, man the wages to which heis justly entitled,
hey will not be expected to pay twenty men Tore than theo be expeentected to to pay teceive.
No one thing can do so so much to No one thing can do so much to improve the
echaniehal standing of the country as a k knowlechanical stauding of the country as a knowl-
olge of the fact, than swift and subtantial rec
gnition awaits gnition awaits every material alvance of the
hividual workman ; and further, that workten should, see that, no joealousiers on thet work- part
tand in the way of such a.consummation. It is a point worthy of more consid dration
han it thas received, both from those who pay
from those who receive wase whe nd from those who receive wages, whether
nore cannot bedone to develop the latent abil.
ties of some mechanics, thereby directly beneAles of some mechanies, thereby directly bene-
ting all parties mime diately conerned and
inirectly benefiting the whole country.-A mer

## To Get Corn, You Must Sow Corn.

 atcome of appreeiation and liberal patronage by
he masesses. While many have reaped wealth and
Trunes by publieation venturos people of all
 asses have reeeived in return for their smal
ubscription outlays an amount of information
hd practien

 ruet and benthe who peruse their col mns. In this respect, there is no journal pub
ished in the English language which more sin
Srely and honestly proposes e cerely and honestly proposes to furnish its read
eros with more valuable and instructive matter
than the Californua Architect and Buiding Re , ivo-ving matters bearing largely upon home
 State resources, the wise, juidicious, and proper
maprovement of of eal estate, and oth mant yani
ary and other sciences which contribute to the ary and other sciences which contribute to
happiness of makkind.
Hence wé siny, EVERY citizen of SAN FraN-
 ournal oftend is kind published west of the Rock
Hountains, and the only channel through whic Mountains, and the only channel through whic
he innumerable important and valuble fact
Connected with home, building, sanitary onnected with home, building, sanitary, and
other pertinent sciences can bee obtained. The
the aily press furnishes occasional items oupon
hese ehbjects, but each houmber of this jounal
is whole volume in itself, as compared with ny daily publication.
Its fuptrter claims to supprt, particularly upo
hhis coast, are its recognition by Eastern an
 hitectural, and others represented inaters c a
hinns. Consequently, a large proportion of


 ing so it will enable the carrying out of all the
grand purposes contemplated by us, and assist
us in proturn a jumat whinh shall have no
superiors on this coast or elsewhere.


## PIONEER WHITE LEAD WORKS.



What is required to a success a manufacturing enterprise?
Nature is generous with her gifts; but she since commenced the manufacture of the ser
White Lead in this city. Nature is generous exercise of his endow- They purchased ground on Fremont
forces man to the it thus gives employment to an Army ments, to develop them, and give the sub- street, between Howard and 270 feet, and
stance a form for his appreciation and enjoy-
ering a surface of $13766-12 \times 25$
thereon erected factories and sheds, for the stant.
ment
And in fact, everything in and about the
The very many natural resources of ths
Coast are marvelous, and they impress all Coast are marvelous, and they impress al . Their, are on the most approved plans, does the employment of the many branches
thinking visitors with the conviction of a pliances, thinking visitors with the convicucon and and excel in detail and completeness those of industry hereinbefore enumerated dem
great future. With but few exceptions, and great fondrous gifts of Nature are at pres. of any other White Lead. factory in the onstrume this fact: that as they are ald ent but mere curiosities, and are spoken of world.
and written of only as such-with prosy
This is essentially a home institution,
conss on the Coast to supply them.
and written of only as such-win
theories on their practical value if utilized.
To the business.man, scientist, or to the product of their mills.
To
Few can realize the ractical thinker who comes aur peonst realize the importance It is a matter of surprise that our people,
with their wealth, do not develop these
In the first place, it encourages the de-
In topment-of our mines, as all the pig lead resources, and build up our coast with a a cop is the production of our own coast.
working and useful population, instead of used pursuing the selfish course they are now, It thus gives the Miners employment which is that of the usurer.

$$
\begin{aligned}
& \text { Which is that of the usurer. } \\
& \text { Our capitalists and business men are As all lead } \\
& \text { blind to their own interests, in not inn get the metal, }
\end{aligned}
$$

teresting, themselves in the establishment it thus gives the Smelters employof manufacturing enterprises, which will se-
cure for them a certainty of fair returns cure for them a certanty
for their encouragement.
The people of this Coast cannot afford to
$\qquad$ pendency on for eign sources means our im-
poverishment. Manufactur ring yourartees
the reverse, as it furnishes employment to poverishmend. it furrishes employment to,
the reverse, as und retains among us, consumers, that vital $\underset{\substack{\text { quasticrity. } \\ \text { prosper } \\ \text { We have }}}{\text { all }}$
We have much pleasure, however, in be-
ing able to refer to some notable exceping able to refer to some notable excep-
tions to the general apathy of our business
and moneyed men. and moneyed men.
Heading this article will be seen an illusHeading this article will be seen an and
tration of the results of the energy and tration of spirit of one of the leading and pio-
public
neer mercantile firms on the Pacific Coast.

Pioneer White Lead Works
Pioneer White Lead Works
Is not excelled by any other make in the Is not excelled by any other make in the
world. It is guaranteed strictly pure; it world. It is guaranteed strictly pure; it
is white very funely ground, and has superior
body and covering properties body and coverang properties.
The manufacturers announce their deterThe manufacturers announce their deter-
mination to always offer it to consumers at mination to always offer it to consumers ad
less prices than any imported brands. As against the imported, there would be
great economy in its use, even at equal
prices. All painters know that White Lead great econom
prices. All painters know that White Eead
that has been packed any considerable time loses a great deal of its vitality, in the ab-
sorption by the kegs of a considerable quansorption by the kegs of a considerabe
tity of the oil; leaving a hard mass in the kide, involving, time and expense in its ex-
traction and working up for use, and a traction and working
costly addition of oil.
The Pioneer being all freshly packed, all this expeiise is avoided. We know what the White Lead is, and
we We have no hesitation-in fact. we take
pleasure-in recommending our brother architects to write it in their specifications
and to insist on its use: first, on the score and to insist on its use: first, on the score
of quality ; second, economy; third, the of quality; second, econo
general benefit to all of us.


floor plans of c. h. Lights residence.-Plate 3.


|  |  | Our Illustrations. |
| :---: | :---: | :---: |
|  |  |  |
|  | taken-to pick up every bit of metal that may have fallen on the floor, are preserved, and in | Plate 1 represents "Paurott's Building," which is particularly referred to in another column, under the head of "Crinite and Sandstone Front |
|  |  | der the head of "Grinite and Sandstone Fronts in San Francisco." |
|  |  | Plates 2 and 3 represent the front elevation |
|  |  |  |
|  |  |  |  |
|  |  |  |
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|  |  |  |
|  |  |  |
|  | nds of dollars a year. |  |
|  | part of a tree, and scraps, that a few years ago accumalated so rapidly as to be a source of in- | No. 4 is the elevation and plans of a neat and exceedingly convenient cottage, sufficiently ex plained by the cut. The cost of its erection can |
|  |  |  |
|  | convenience, and consequently expense, are now sold for a good price, and are in great demand. | Timber in Brazil. |
|  |  |  |
| ughtsmen ise india ink in preference APPRENTIC |  | counted one hundred and seventeen diffierentkinds of woods, many of them admirably fitted, by their hardness, tints, and beantifulu grain, for Ahe finest cabinet work. The muirapinima, tor |
|  |  |  |
|  |  | Wood in the worrid, is found in large quantitythe tributaries of the upper Amazon, where |
|  |  |  |
|  |  |  |
| Business Manager of Architect:--Is th any known remedy for the prevention of | - |  <br> the white and black maraquatiara, the maca |
|  |  |  |
|  |  |  |
|  | the simplest sanitary laws in a great part of the plumbing that is done nowadays, that it will | and the saboarana, both of which are rivilthe most beautiful walnut, are wasted yearly |
|  |  |  |
|  |  |  |
|  |  | explorer, believes that with the facilities which the Bravilian Government is ready to impurt to |
|  |  | the Brazailian Government is ready to impart to enterprising industry, the export of these com- |
|  | find plumbers themselves admitting, discussing, and seeking a remedy for it. The plumber is re garded by some people as a being entirely devoid | shortest time, while the capital invested need not be enormous. It is only necessary that these |
|  |  |  |
|  |  | Woods be introduced into the market to obtain adeided preference ver those now most soughtafter in the two hemispheres. Still richer is the |
|  | of conscience, with a clearly defined dispositionto render the minimunu of service for the maxito render the minimuml of service for the maxi-mum of pay. But the responsibility for bad |  |
|  |  | ater in in the two hemispheres. still richer is the |
|  | rests guite as much with contractors and buildersas with the plumbers.ad plumbing is cheaper |  |
|  |  |  |
|  | exterior is concerrned it looks about as well. The |  |
|  | contractor, therefore, whose chief anxiety is tohave the margin on his oontract on the right tidefor himself, feels little uneasiness about the sort | macaranduba and itauba, or stone wood, furnishes ship timber as durable as teak. The |
|  |  |  |
|  | of air which the occupants of the house are to breathe. He pays for cheap plumbing, and the plumber gives him what he pays for.-Boston | longer these remain in water, the stronger and harder they become. . The former will comparethe more favorably with the teak, imasmuch as it is more compact. A pistol bullet which willpass through an inch board of teak wood, will not penetrate half an inch into a board of acapu. The itauba tree, too, offers many advantages over teak; it branches off naturaty into keelsand ribs of any size, and is lighter and more |
|  |  |  |
|  |  |  |
|  |  |  |
|  | The painter is often asked what the painter's colic feels like. He could not probably de scribe it better than to say to those who do notwish to try the experiment, that if the strands |  |
|  |  |  |
|  |  | resistant. $\qquad$ <br> Brain Power and Machine Work. |
| s. In | of a rope, while being twisted together, should be passed through the bowels horizontally, and |  |
|  |  |  |
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|  |  |  |

Sewer Gas and Its Dangers. There is said to be a distinct, odorless, and
non-analyzalo element which has been denomi
nated sewer-gas, and which is as deadly yin its








 due to chenical changes in organic matter which
has been taken intothe lungs. This may come
from a sewere, catehthasin, drains, privy-vaults,
 comes so soon in contact witht the surrounding
atmoshhere, that it it rendered ompmatively
harmless. The air which escapes from sewer

 sewers were open, at the top throughout their
entir length there might be no danger from
the exhalations exeept posily from the erms
of contagion whicl may have been carried into of contagion which may have been carried int
thie sewert by water used in bathing the bodie
of the sick. But this danger could not of the sick. But this danger could not be so
greata that which, to timited extent attend
the breathing of the atmospphere which has the breathing of the atmosphere which hat
thievet through a sick-room, ,und which many
people do unavoidably and with apparent inm people do unavoidably and with anparent in
punity breathe. In some cities of Europe sew
age is conveyed away in open guters, without age is conveyed away in open gutters, withou
serious discomfort or danger. In others, ther are openi man-holes leading to the sewers, and
the gases generated are anlowed to passo of rifely
and without danger. Sewer-gas is to
and when it insidiously and persistently finds en
tranee to louses, oftices, or buuilding of any d
scription io whic seription in which people. live or work. Theer
are sone e poople who beiveve tit can do harm,
others know by sad experience that it is de structive of health, and robss life of enjoyment
but they imagine that they are helpless agains it. Again: there are miany thousands sutfiering
from its effects, and they are entirely gignorant
 warning note should be sounded, and for their
especial beenefit, as well an of tho those who know
no remiedy, the means for stutting sewer-gas no renledy, the means for shutting sewer-gas
out of house, if there are any, ought to be
made known in the fullest and widest possible sense. The sanitary surroundings of the poor are
so often the theme of pencil and tongue that
so so has come to be be beilieved that death and
disease do their work mainly among the middle and lower classes. Deacying garbage, cesspoole
and miscellaneous fith, in suther yard ,
house, are known to be hot-beds of malaria Children in overcrowded tenement-houses an old rookeries standing on an island in sere seak
of stagnant axter diot by the dozns ever week,
and people allude to the circumstance as a natand people allude to the circumstance as a a na
ural consequence. But an emissary of death ural consequence. Ben that are known at marb-
lurking in the hemes
fronts, and herforms his duty with relentlee
certainty. There may not be so many deat certainty. There may not be so many deaths
among the young on phed streets and in well-
ordered houses, but there atre delicate childrem


The former are supplied. with all the auxiliary
conveniences whhich ingenuity can invent. The
onv whe

 nder his charge, all that is supposed to tor thosote
vealth. And yet he often rises from bed in th Lealth. And yet he often rises from bed in the
nornimg with a henadache, and strifrs from gen
ral depression ; feels more weary than when h ral depression, feels more weary than when he he
retired, ;sis ifliteded with disordered stomach
ent




 into them. Sewer-gas is a curse to marble
fronts as well as cheanp houses.
The construction of house -drains is now
 themselves alone. When completed, the work
ts so effectualy concealed, that no one cold
Gnd out, if he desired to, whether it was well ind out, if he desired to, whether it was well
done or not. The result is. that competition
has reucu thed the work to a shan, and those

an exception. The worst of it is, that the peo-
ple thenselves, who monst sufter in onsequence,
do not realize hlis and are oso slow tol oenn the
facts, that the penalty of death, even, lias been
nd must be paid over and over again for the
An es es
An orance. esential element of sewer-gas is sul.
phureted hydrogen, deady poison. This is in
itself a sufticient angument that there is dange
breathing sewer

 las been burned, argument heaped upon aever
ment will not convinee many poople that sewer
gas is is destructive of life as fire of builings until the actual results are placed before them
Se wer-gas does not always kill. It poison
Ihe blood of once healthy men ind wo Che blood of once healthy men and women, and
destroys or cripples their capacity for business
enjoyment.




Iron from Black Sand.
 an from Broklyn, N. Y., are going to use it

 of the chutes it is is placed in bays, each holding
112 pounds, and shipped to Hoboken, and thence
to porm 12 pounds, and shped to Hoboken, and theng.
to Reokkaya, N.J. T. Ther it is ionded on wag
ns, and afterward taken to the furnace. It is ons, and afterward taken to the furnace. Yt th
mixed with harcoal, , aten by levator into the
hopper and distributed int sixten larg cylinerps holding about ten tons, ,nand heared to to red
eat; then it is tapped at the bottom and let down into a large oven silil kepe at at a red heat
and there burns out all the charcoal. Then irn
loors are opened, the sand is hauled out into doors are opened, the sand is hauled out into
large harconl fre, an forms a mass "hich is
hammered by arge steam hammers into bloomis hammered by large steam hammers into blooms
weighing ofry 200 to 300 pounds. Large build
ings will soon be put up on the island, and, as ings will soon be put up on the island, and,
the supply of sand is practically inexhaustible
the industry is likely to become important

## Noeded Plumbing Regulations.

We have repeatedly urged the necessity for
 not entirely laws control would, to oome extent regulate those
ranches of mechanical operations which so
 he abuse of the brute ereation, and the inhu,
nane treatment of ohildren in a physical sense,
lit the greater evils which producs a thousand
 lisease, and denth itself in family circles, is a
owed to continue without a singlo corrective ef
frt. The medical faculty, without a dissenting fort. The medical faculty, withour a dissent
voice, fafirm that a very Irate proportion of the
sicknes previling anung the inhabitants of
Sin Francisco is malarial in character, and an Franisoco is malarial in character, and





 man, woman, or child is deprived of his or h. he
existence by means lacking the "intent to kill, distence by means laching the then if slain by
are they any moreor less dead than
he assassin's hand? To this there is but one he assassin's hand Tho thin there is but one
unswer, and no other conclusion can be reached nswer, and no other conclusion can be ten that
lhat that where death is oused by other the
natural cuuses a deatee of criminality attache
 the execution of important and intricate bran"
ees in house construction, because they "
fer to do the work cheoply
And so
ole
 y which work is ite by ownenss, just so long will
Ocreased diseasa and fatailities prevail in this
r any other city where the same rules are prac.
 New York, Chicago, and other cities hav
learned torealize the value of thesestants anh
have wisely seet to work establishing laws, which
 tice or hold in theck, that class of heartless
who care not what may be the result and con quunces of their botehery and mechanical mal
practice, so that they pocket the profits glean practiee, , so that they pocke
froo their wretched work. But unfortunately, the people of California
are an endurig and patient tets, not easily per-
suaded -nor provoked to take any interest in rane an enduring and paiient set, not anserest
suaded nor prooked to take any interest
matters outside of their respective personal ro
 follow the examples of the Eastern cities, a a col
siderable amount of press preaching and exhort
tions will be neessary. But meanwhile, tho
 this perporm the functions of his position, a
not fin to fulill his mission, olong ano wn
not real estate and the public authorities rema of fail to futatill his thission, sublicaunhitites rem
ondiferente But we may be answered that

 only by the adoption and practical applicatio
of wise, mechanical, and scientific principles.


| andstone Fronts in San Francisco. |  |
| :---: | :---: |
|  |  |
| at |  |
|  | There are a number of buildings in whiel |
| explain away in detail, so much of error as is |  |
|  |  |
| the |  |
|  |  |
| but those which should |  |
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|  |  |
| ${ }_{P}$ |  |
|  |  |
| is |  |
| in th | 211 Sansome street, were designed by |
|  |  |
| street, and three stories in hight above sidewalk. | remaining, portions of |
| The sto |  |
|  | Her stone fronts And bulidin |
| Cenina, and and the stone cutting done by China- | The Jen |
|  |  |
|  |  |
|  | Ihe Unio |
|  |  |
| apparatus being used by them. The building |  |
|  |  |
|  |  |
|  |  |
| eet, |  |
|  | grante basen |
|  | th |
| "Express Builling," north-east corner Mont- |  |
|  |  |
| first story only of granite. |  |
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|  |  |
| ported from China. |  |
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|  | inches. The cost was block or lintel over the |
| Building," California street, between d Davis streets |  |
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|  |  |
| nnce is so trifling, that they would add | The purpose |
| to the interest of the subject in hand, |  |
|  |  |
| designe |  |
| "San Francisco Stock Exchange," orected in |  |
| ${ }^{1876-77}$ | kind in S |
| Pine street, by a depth of 137 feet 6 inches, and |  |
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| ron |  |
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| to a considerable hight |  |
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Can m - Ano Ancents. Can man reach and pass the age of a hundrod
years isa a question concerning which physiolo-



 ,









 wenty years, and he only exceptionally lives
leyond one hundred years. The same physiolo.
fst admits however the her
 Ions of comfort, sobriety, freedon from care, re-
gularity of hablits, and observance of the rules of
yriene, and he terning
 with the aphorism, "Man kills himself rather
than dies."
hon

Girls as Engravers
A wood-engraver gives the following reasons
for not enploying females: "I have emploged
orem

 foels that it is life's business. He is is to cut his
fortune out of the litile block befor him.
Wife family home, happiness and all are to be Nife, family, home happiness, and all are to be
carved out by his own hand, and he esettles
leadily and earruestly to his hon deternind
 him on. He cannot marry until he knows his
trade. It is exactly the other wiy with the girl.
She may be as poon as the bri she ay be as pocor a at other way wayd with the ghiolily
sependent upon herself for a living, but she
dit lependent upon herself for al living, but she
ceels that she will probaly marry by and by,
and then she must
 she goes on listlessly; she has no ambibition to tox-
cel, she does not tee that all her happiness
depends on it. She will marry, and then hen her lusband's wages will support her. She may not ay so, but shese whinks supp, and it spoils her work.

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THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.

Health Offlcers' Report-Bad Condition
of Sewers.
In recent reports by Dr. Meares, Health Offi-
cerr reference is made tot he fearfully bad con-
dition of the sewers of San Fruncisco, particular

those south of Market street. The Doctor,
however simply ritctates swat has heretofore
appeared in the various issues of this journal,
by such a course, and the thousands of lives that
would be preserved within the next ten years,
the outlay would be many times comensate.
Co that Co outlay would be many times compensated.
Continual crying out against evils that exist
never furnishes a remedy. It is alone in the re never fu
moval
found.

## Departures from Old Styles.



The desire among owners of real estate for
 something new in architecture seems
in and sections of the United States. The de-
mand uppon arehiteets for new ideas and concep
bonate of soda, which might suggest the reeeption
of arromicicacid intothe hlood, were noticed
of the ten cases of which a detailed account is Of the ten cases of which a deta, ided oacount is
iven by the author, one ratherserious case may
related, in which the burn yiven by the author, one rather serious case may
be related, in which the burns liad spread ove half the body. The whole face was stripedo
epidermis the hair was singeo off, and the ron
of the ne hipidermis, the hair was singed off, and the front
of the neck ehest, and and adomen, and the dor-
ounn of the foot, presented burns in the seocond sum of the foot, presested burns in the second
degree iours or the thiru deen were anso
found on the right mammary gland and on the
mand upon architects for new dideas and concep
tions in house planning and ocontruction, noo
only among the bettertod ond wealty lasses
ont
 Chan a small cottage is contemplated, it is ex
peeted that somene en idea a will be introdueed Hence it often occerrss sthat features by no mean
in harmony with the general character of build ings are introduced, forirthe purpose of satisfy-
ing this ocmmon desie among owness for do
ind
But the or odd ng this conmon desire among owners or or or
partures from former styles. But the odo
looking things, if such is looking things," if such is produeed, frequently
operate to tho disadvantage and discredit of the
arolitect; for if the general effect and result operate to tho isfadvantage and fiscreadit of thent
architect, for if the the and result
or the details are bad, the blame is placed upo

 The fact that certain peculiar features ma
have been introduced and urged by positive
ders from the owner, never appears nor inte ders from the owner, never appears nor inter-
veneot to protect the man of pans.
shoulder must
shat rest responsibilities, and submit without redress to adverse criticisms and comment, be
cause hec annot gain the ear of the many wh
eriticise and there are none to plead lis defense
 This fact points to a defect on the part of man
architects in the ocnduct of their prof ession
willingness to comply with alnost every possibi





 they permit or be parties
some disreputable thing.

The Treatment of Burns.
The London Medical Record says, that Dr. J.
Troizki adds his testimony to that arlandy pub lished as to the ralue of solution of biarabonate
of soda asa dresing for burns. He easys, tha of soda as a dressing for burns. He seys, that
diring the revious year, he notice twenty-five
cases of burns, mostly of a severe nature. Six




 <br> \section*{} <br> \section*{}


nitiont

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\begin{aligned}
& \text { and disinfectar } \\
& \text { conclusion non } \\
& \text { gistst' Circullar. }
\end{aligned}
$$

Don't Stop.
Do your work at once. Don't stop to daw dle.
And if ever you find yurself where you have
so many thins pressing upon you that you so many thing pressing upon you that you
hardy know how ot bein. let me tell you
harderet: take hold of the first one that come secret: take hold of the first one that comesto to
hand, and you will find the rest all fall into file
had follow after like a conipany of well and follow a tert like a conipany of well-rilled sol-
dierss and though work maybe ward to mhen

 anher taught me, was the reply, when I had
anything to to to go and do it. There is the
secter-the to word secret-the magii wor
facturer and Builder

To Prevext Guve from Chackiva. The
racking of glue, which frequently occurs when




## Diphtheria Faots.

Good Health for November contains a lengthy
article in reference to the "serious nature

 State Board of Health, atter careful and tho
ounh consideration oft he matter, have puy
lished a document setting forth: ough consideration of the ma
lished adoument setin forth
sst. That when a child or $y$




 $\underset{\substack{\text { theneri, Any } \\ \text { isolited. } \\ \text { ish } \\ \text { cation of }}}{ }$ occupied by di
cleared of earpe
saity articles,

## sary artices, Fresh ari and sum discharges from

discharges from the throast, noses, and mouth
are extremely liable to comunicat the disease,
and should be reeeived in vessels

 charges are also dangerous, and should
passed in vessels ocontaning the abooe solution
and be disposed of ty burial in the ground,


solution for chamber-ressels, or water-closets,
ete. When much is required. it may be pre
pared by hanging a basket containing sixty

removal from the patient, should at onne, before
removal from the room, blace in a poin or
tub of boiling hot zinc solation one gallon


frequently washing their hands and using disin
fectants
H1lh. There is danger from contact
with convalescents, until), beyond all question
every vestige of the disease disanpears. N
nerous onther reacutions follow referce
disinfectants, destruction of clothing, etc. "
disinfectatst, destruction of elothing, etce. "1
not kess or take the breath of any person
sore . throat.
Do not
not drink from the same cu

into your mouth." (The precaution in italics
shoull not be needed. It is on absurd and
foolish pratio. The result of a bad habit
Which practis and school teachers should man-
age to .oorrect.- ED.).

## How to Treat Plumbers.

The sanitary importance of goop plumbing
cannot be overestimate. The relation of poor
plumbing and sickness in the household is muich
plumbing and sickness in the household is muth
closer than people.genarally suppose. Nowhere
does cause more rapidily follow effect than here.
O.
Oos cause more rapidy folow effect than here
Of course every one who builds house under
takes to provido for the right kind of plumbing;
but between the carelesssess of the bilder, and
the
the ignorance or what is worse, the dishonesty-
of the pumber, half out houses ser inothing but
receptacles for the most deadly poisoss, often
becoming germinating placess for pestiliential dis.
eanes. Accunts of inspections of houses ind dif
ferent parts of this city which have recently
Cases. Accounts of inspections of houses in dift
ferent parts of this city, which have reeentl
been published in our daily press, show a large
been published in our daily press, show a large
number of residences where the plumbing is of
the worst possible description. No wonder that





ism, and a variety of blood -poisons. A move-
ment is being inaugurated in England which is

[^3] can experience in testing drain pipes, confidently
recommends for that purpose, what he terms a
rcmokng test, and which ives xidene as to
leaks both tos osight and shely



 e one of the best disinfectants, and a dose of the
e f funes from this to the dranins anter disease has
been in a house, would effect nuch good.
hll.
Market Reports.





$\qquad$
a Ron
T"


Do not seek to leanm too rapidly, nor affect to
comprehend great facts and principles in haste





$\qquad$


 through life at a level far below what might
have beif reached with a nore prudent and
wise beginning.

Testing Drain Pipes.
A writer in the Ironimonger, from long practi-
cal oxperienoe in testing drain pipes. contidently
recommends for that purpose, what he terms a
$\square$
$\qquad$
$\qquad$

120
THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.

## 




## Building Intelligence





















tahi
aldultions to building corner San Jose avenue and 23
and



##   SAN FRANCISCO, DECEMBER, 1881. $\left\{\begin{array}{l}\text { \$2.00 per Annum, in Advance. } \\ \text { Single Copies, } 20 \text { Cents. }\end{array}\right.$

The Culifomia surchitect

## BUILDING REVIEW.

N francisco archifectural publubing
JAMES E. WOLFE, Editor and Manager
GEO. H. W. Morrtoomery strebr. Room 11, 240 Montgomery St.
 sent to Forcign Countries.
Entered at thy Post offco at San Francisco, Cal

| On outside of front cover, and pago following Build. ing Intelligence, per square, each insertion....... Ontside of back cover, and page next preceding read. ing matter, per square, each insertion............. On other inside pages, per square, each insertion... $\qquad$ With r tisoment <br> Our Closing Issue for 1881. <br> Satisfied with the past, we look forward with pleasing anticipations for the next ensuing year. Since the establishment of this journal in San Francisco, it must be admitted by all who understand the true conditions, past and present, that a very much better state of feelings exist among the architects of this city, while members of the profession in other places have been brought into closer intercourse and more friendin former years had estranged and antagonized members of the profession, have, in some degree at least, been modified, and harmonies vitalized and established, where coldness approaching personal disrespect formerly prevailed. There is a lesson in this fact worthy of n illustrating how men of good purposes and equal claims, personally, to kindly recognition may lutely enemies. Men may educate and train themselves to love or hate each other, according to the control asserted over their wills and dis- |
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nisco and on the Pacific
$\qquad$
Summary of Building Improvements in
San Francisco for 1881.
The monthly reports of "Building Intelli
gence" appearing in this
gournal for the yea
1881, have been so nearly correct and compplete,
that they-may saefly beneeetpeteas-rppesentimg
the approxinately correct state of facts for the
year







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x_{10}^{6}
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ceitice

 reached too high a figure, more through the spir-
tit of ppeculation than otherwise. The purchase
of property upon the basis and for the exress
purpopes of selling hat anadvance, without appre-
 rentals must be enormous, and the "high rent",
system neer works to the advantage of any city,
as it oompels higher priee and greate prots on
aood sols greater rental for fanily residences.
 the s tandard beyond all reason, and to rend
then valuble asinvestments if tuilt upon-th
rentals must be enormous, and the " "hiogh rem goods sold, greater rental for family residences,
and onsequent increased cost of livini
which are hell
of in argument against cities wherewhich are held in argument against cities where-
in in costs all that those ewho are not most ortu-
nately situated to live. About the first thing considered dy parties contemplating a chango of
residence, is the costatand expense of living and
many turn away from


 Ing. And as his. city ore than excessive value cost was nam
tion mean mestan
in real estate, that which tends to the latter at $\$ 3,790,732$.

 in this jour
Deember
following:
Of aver ollowing:
of alteration and repairing jobs. ............
This number, however, does not include (This number, however, does not inciude
al of this class, as we have reported only al of this class, as we have reported only
fhe more prominent cosses, leaving the many
of smaler importance to take care of themthe more
of smale
felves.)
Of brick buildings. .....
Of residence buildings.
Total reported erections during the year


 Being a History and Description of the Square. Methods and rules given by which the length and bevels are ob-
tained of all kinds of rafters, braces, collar-beans, brackets, etc. Its application to the various cuts in stair-building.
 problems in regard to the cuts in carpentri
In the daily pursuit of mechanical operations, the
workmen should hold steadfasstly to the motto, Acthe junction of the
ally called the heel.
The FAcE side of curact in all things. It should be the first and most The face side of the square The e ACCE side of the
seen by holding the assential requisite, and ever present in his mind. Of
necessity, for. work to be accurate, tools must be in the same condition; but, like our common hu-
manity, only a few of the instruments used are what they purport to be, exactly true and cored are whe Espe
ially is this fact true of the Steel Square. A conside ally is this fact true of the Steel Square. A consider-
ble portion of them being faulty and imperfect,
barying from a "hair's breadth" to material inacenracy. The manufacturer's. nime and the trade number are
ilways stamped upon the face side. The reverse sid is called the Back.
Of the two arms wi, Of the two arms which form the square, the longer
is called the "body," or "blade," while the shorter arm is called the "tongue." The formere is 2 feet long
and 2 inches wide, while. the latter is and 2 inches wide, while the latter is generally 16
inches long and one and $a$ half inches wide. The "tongue" of the zuare, however; wio di wief wish term admits of no deviation from two perfect right-
 necessity to perffect workmanship in any connection.
Even if true when they leave the manufacturer's hand,the handling and use, and frequent falling and and abuses
to which they are afterwards subjected, and sometimesbe exposure to extreme heat and cold, changes the
relationship of the "tongue" and "blade," and hun-relationship of the "tongue" and "blade," and hun-
dreds of mechianics and others pursue their daily avo-
dreds of mechanics and others pursue their daily a ano
mong twenty workmen.
The result of using such squares is a large amount
imperfect workmanship and loss of time, which
of imperfect workmanship and loss of time, which
could be avoided by the workmen making a practice of
"trying" or "truing" his square at regula
"trying" or "truing" his square at regular intervals.
Unfortunately, nany of our mechanics have no well-
defined views or rules, by the exercise of which they
will be enabled to select, not only well-finished, but
strong, durable, and accurate tools, which can be de-
pended upon in every emergency.
It will not always do to aceept any certain tool,
simply beeause the maker's name upon it has given it
aimply beeause the maker's name upon it has given it
a world-wide reputation, and therefore of necessit
$a$ world-wide reputation, and therefore of necessity
must be good. Of course it is always best, as well as
cheapest in the end, to call for tools having the greatest
reputation, and recognized as the standard of its. kind
reputation, and recognized as the standara of its. kin ;
as is is then that a good judge of tools is enabled
to put into practice all those little poonts that may
come under his observation during the time he may
ave been working at the bench or shop.
have been working at the bench or sho
There is no instrument in a carpente
kit " that should be more strictly and accurately cor-
ect in every particular than the one under present
consideration. And we propose to be so explicesent in
our explanation and description of the square, that
even an apprentice, after reading these articles, can,
not only be able to pick out a good and true square,
隹
but also be able to explain intelligently to any
Use of every mark, figure, and line upon it.
The best square known to the trade is that.stamped
with the number 100 on the face side of the square, at
account of the "rogular frananing ", of buildes longs, be-
ing more geierally adopted than on this buididings of the
continent. $A$ square with a tongue 18 inches long is
continent. A square with a tongue 18 inches long
generally known in California as a FRAMMNG square.
On the outer edge of the face side of the
Denerall known in Calitornia as a FrRasurg square.
Onter edge of the face side of the square, the
divisions or graduations are marked into sicteenths of
an inch on both the "body" and "tongue," while the
andide edge is
inside edge is graduated to eighthss of an inch.
on the back of the thange, the outer edre of bet
On the back of the square, the outer edge of both
"body" and " tongue" are gradated into twelfths of
an inch; while of the inner ed the the " body" "
an inch; while of the enner gedge, the "bod " "is gradu-
ated to thirty-seconds of an inch and the "tongue" to
ated to to
eighths.
Our readers will bear in mind that the description
here given applies only to the best grade of squares
that are manufactured. On cheaper grades the inner
edge of the back of the square is divided on both body
and tongue into eighths of an inch,
and tongue into eighths of an inch, and on some, the
smallest division is the quarter-inch. Observe that the
smallest division is the quarter-inch. Observe that the
border around these articles is a perfect fac-simile of
the test
the best square there is made.
The eirst. marks that attract one's attention upon
examiniug the square are the divisions into inches,
and subdivisions of inches. It will also benoticed that
and subaivisions of inches. It will also benoticed that
the numbering of the inches on both "boy"" and
"tonum"
"tongue" commences at the heel. This is done
simpy bec.
that point.
In piekin
In picking out a square, notice that all the numbers,
and division-maly
and division-marks are clearly and sharply cut. It is
in this particular that the result becomes so apparent of
in this particular that the result becomes so apparen
the wonderful accuracy of the Bement machines, a
scription of which was given in our last number.
to be continued.

Send for a
its Jues, "hand
Price, 75 cent
This series of articles on the square was commenced in our
September number. Back numbers can be bupplied at 20 oents

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THE CALIFORNIA ARCHITECT AND BUILDING REVIEW:

|  |  | Sanitary Progress in Ireland. Probaly if most of our readers were to ex- |
| :---: | :---: | :---: |
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| After the reading and approval of the minutes |  |  |
|  | made of a new heading for our Jonuary issue. |  |
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|  | controlded by the facts above related, and shall ${ }^{\text {col }}$ |  |
|  | have to exercise patience and will-be content to and with us the annoyance of an additional |  |
|  |  |  |
|  | share with us the annoyance of |  |
|  |  |  |
|  | Mr. Laver stated his purpose to seek his former possition as architect of the New City |  |
|  | Hall, basing his claim thereto upon the fact, that |  |
|  |  |  |
|  | having designed the edifice and prepared the plans for it, he was better qualified to underplans for in, in all their details, and should have |  |
|  |  |  |
|  | stand them in all their details, and should have the priviledge of directing and superintending |  |
|  | their execution. The members present signified |  |
|  | their appreciation of Mr. Laver's. position, and en |  |
|  | resolved advocate the justice of his application. The secretary was instructed to secure the signatures |  |
|  |  |  |
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|  | the action of the association to a recommendatory petition in Mr. Laver's favor. There being no |  |
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|  | further business requiring attenion, tion adjourned to meet the first Friday in Jan- |  |
|  |  |  |
|  |  |  |
|  | the meeting expressed dissent to the actiorr -ff |  |
|  | harmony with the objects of the association; but at the same time, without exception, admitting the equity of Mr. Laver's claim to the appoint |  |
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|  | dent Several who personally approve the re- |  |
|  | connection with the New City Hall, have withheld the influence of their names to the petition, |  |
|  |  |  |
|  | but with no feelings of opposition to the appointment. |  |
|  |  |  |
|  | of the action of the association, in which similar organizations have recomended individual mem- |  |
|  |  |  |
|  | bers for certain positions; and if the Pacific Coast Association had attained full growth, and |  |
|  | become strong and vigorous, with perfect umber-standings and harmonies anong its members,and all feelings of jealousy and mistrust subdued, |  |
|  |  |  |
|  | a proposition of the kind under notice might have been received and determined with more |  |
|  | certainty of general indorsement. |  |
|  | We trust that the members of the association | , |
|  | will become more strongly impressed with the necessity of regular attendance, so that all future |  |
|  | necessity of begua actions may beyd the reach of irregu- lirities, and the association become |  |
|  | the great work whichit is is destined to accomplish,bygnited and earnest efforts on the part of its |  |
|  |  |  |
| t be occupied | members. Let there be a full attendance at the next rugular meeting, to be held the first Friday in January, 1882. |  |
|  |  | $x y$ |
|  |  |  |
|  | Renewal and Payment of Subscriptions. |  |
|  | We trust that every present subseriber will at |  |
|  | least five others who have not, to subscribe. We mean progression and improvement in our pub- |  |
|  |  |  |
|  | us handsomely. Send tances by postal money-order; bank-check, or ther convenient means will be duly ac |  |
|  |  |  |
|  | any other convenien mand stamps, send the two- knowledged. If postal stat |  |
| association, for the frontispiece, or title-page | not less than <br> 20,000 PAyiNg subscribers. <br> Bound Voluyes for 1881 |  |
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|  | were to be erected, L'Enfant refused to submit his work to public inspection, his excuse being his work to public inspection, his excuse being tliat certain neighborhoods would be seized by speculators, and shanties run up where he designed palaces to be constructed. This not be- ing General Washington's view of the matter, the commissioners took possession of the map, <br> In 1812, he was employed by Mr. Madi- <br> to plan a fort on the Potomac below Wash- on; and later, Mr. Monroe offered him a ington; and later, Mr. Monroe offered him a accept. There are those yet living who remember seeing him, in his somewhat peculiar dress, wandering, an aged man, In the streets he died, ington as late as 1825. In this year he taking his place in the ranks of the vast host of the forgotten bene meritos, He lies buried on the Digges farm, close by his last work for the United States-the fort on the Potomac." "The Act of 16 th July, 1790 , had directed |
| :---: | :---: |
|  | the commissioners-to-provide, prior-to December 1st, 1800 , suitable buildings for the accommodation of Congress, on plans to be approved by the President; and in March, 1792, a preby the President; and in March, 1792 , a pre- mium was offered of $\$ 500$, or a gold medal, by advertisement. |
|  | for the Capitol and President's house verified these remarks, and inasmuch as pains had been taken to publish it in all the principal towns and cities, the architectural ability of the United States may be reasonably supposed to have been brought to light, as it existed in the last decade of the tighteentin century. <br> I have had access to some eight or ten |
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|  | on either side of which is a man rampant, with |
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|  | United states are used to mark the hours. a |
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|  | d indicating the color of the leather, or |
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|  | all, they are, indeed, |
|  | Among the competitors, |
|  | Thornton and James Hob |
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|  | dress delivered at the tenth annual |
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|  | the United States and establish it on the coast . |
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|  | re than he had acquired in two |
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| bsent three |  |  |
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| $\begin{aligned} & \text { answer to } t \\ & \text { and regards. } \end{aligned}$ |  |  |
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| letters he speaks offor Amorici, engeged upon the Corinthian capitals of <br> Ane Hall of Representatives." © A the corn-stalk |  |  |
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Why the "City Press", do no












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 moror reliable reports of bulding inteligene
for there its
Ther is iso these two material facts whic




















 the home company.
thh. Stained glass is made by painting the
unface of clear glasss with vyious materials
lieffy the oxides of metals mixed usually wit



$\qquad$ Lount of the art of lithography. We have no
he epace to detail all the various operations
heeessary to produce i fine lithograph. Briefly stated, the operation is as follows The artiol
draw. his. picture on the stone, just as he would
 Ass. - The idea of th. \& D., Berkeley. said to have been derivede from a plant capital isc-
 ved, put them in a basket on her grave, and
da tio on top of it it by hane, the basket
as placed on the roots of an acanthus plant, and this, sprouting in the spring, partly covered
the basket with its leaves, some of which, reach-
the tile, turned downwards. An andehtect named Callimachus, whio happened to see it, was fine capital bor a a column ; and by changing it
little, he made the Corinthian capital and
ailumn. lumn.
Edrion of Caufoña Architger And $\mathrm{RE}-$
TEw:-Will you please answer the following in
 copyright of his drawings on a structure in
proeess of recetion, acan another party obtain a
tent on said drawings or structur rocess of erection, can another party
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ARcHirecr.

 representations and designs made on paper
arehment, canvas, eloth, or other fabric -pho
 structures, machinery, ete., ete.; but. not to the
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cution from suich drawings. These cal only be
"Our Illustrations."
Plate No. 1 represents plans and designs for
two-story cottage in Eastlake style, with attic two-story eotage in easthane shle,
tory additional, adapted o country or suburba
loolities. S. J. C. Newsom, Architects. ocalities. S. \& J. C. Newsom, Architects.
Plates 2 and 3 are the eleoration and plans fo
 erected in ban found in another column.
whinh will be
During the next next volum of this journal, we Whidring the next rolume of this journal, we
Dhall mate a much beter showis jour illus-
trations. We have before stated the difficulties trations. We have before stated the diff cultes
in producing meritiorios cots, but as soon as
the better facilities can be reached, they will be be the better facinies can end this department of the journal
availed of and
be made equal to many of the Eastern journals be made equal to many of the Eastern journals
in this particular. And when we secure the
An minimum of our ambition-20,000 paying sur
sciribers-neither in cuts nor reading matter wil
 tion of the "Tabor Grand Opera House and
Jotel," Dener, Colorad, will appear in the
January issue, together with several other illusrations.
Physicians and Population
The Practicien gives the following table, as showing the proportion between phy
population in the countries named :

| population in th | Per millio |
| :---: | :---: |
| Austria | 610 |
| England |  |
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| Germany | 610 |
| Italy...... |  |
| United States |  | Switzeriand...

United States.
\%




Plate_ 3. - PLAN of new bathing establishment.





 per month.

Draughtsmen, Students of Architecture,
and Architects.
 and Arctio ha,
The following suggestion hat been made by
several members of the profession, which, if en.


 that the peopele of thise. great cionty will en
tand sustain the enterprise. It will be
and
The Nubian Bathing Palkce.
The location of the pplace is not yet fuly
termined: one site proposed being upon The location of the palace is not yet fully de- $\begin{aligned} & \text { style. } \\ & \text { termined : one site proposed } \\ & \text { being upon the } \\ & \text { No. .11. Hot Salt-Water Baths. }\end{aligned}$
$\qquad$




 also a Heelth Institution,
Where the alflicted may find relief almosu
every malady or disease known to suffering hu-
 same or some better methods than those sees set
upon by ourseves.)
Tre Prospecrus. for the bathing palaces set The prospectus for the bathing palaces sets
forth, that it will, in any case, be located within
eass reach by several lines of streat cors. That


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 apparatus, which will regrlate the temperature
of the water to a degree which will prevent
chill and eranps and aford most pleasant and
agreeable abbutions to bathers.





 infusions from three separate boilerss.
No. . Hot Herbe Baths, especially adapted to
the cure of nervous aftections, stiffness of joints,

THE CALIFORNIA ARCHITECT AND BUILDING REVIEW

The Tabor Opera House-Denver.
As. Edbrooke, of Edbrooke and Burnham, acte and as the supervising architect of ornstruction
while the plan and details were incro es
whet

 ho professionan depart ment oustion his abilities to produce eveen
no "Wienutiful" a building as the Tabor Opera
so

 ke place-or in attemptingto deseribe its seai lies one must llose sight of lengthis, widths,
Hights and depths, for, to say that the hand
igie railings around the balconies were fou nches and a half wide, and that the massive cor
 perfect harmony, that ono ollompstlete, ingets so bu be
critical. The writer las, therefore, discarde
The he dry menortant in comparison with the
 through the marble entrance into the dazzingly
oright rotunda, and oni int the foyer of the pal
quet. Although the heary curtain hanging quet. Although the heary curtain .hanging
ticross the main entrance to the auditorium be
be
 hefore going further.
TThe massivenss and strange beauty of tho architecture of the ancients has been revived.
It is old, yet new. It is like a rexilized dream
of the grandeur of the great works of athousand
on
 the construction As As ons inders forming a grace ing, with its maste tome in the center, from
square aroun the don
which sings hriliant chandelier then the the
pagoda-like arrangement of the boxes, and at at
 -reality. Mhere is no touse everything, that one
solidity a reichenss abo
must examine and realize before he can appre ciate
0oo by using cheap woods in the interior construction of the opera House, in the place of to
highy poilishe and carved chry which is
found in in all parts of the building, even where tound in al parts of hne ess one takes the troubl
will neer be seen,
to peer into nooks to look for it. What attract attention at once are the novel boxese. Al
thought he thener would be beautiful without
them, yet it would lose ist chief charm were they, constructed in any way onther chan than were
are. History tells of boxes tin the olden-time
 people of note, that were much hike them;
yet these are so novel, so original, as to not be the counterpart of anything. Not only is orig
inality shown in the contruction of the boxes
inates arranged. In most theaters, , rivinate boxese are
artly on the stage ; that is, in the proscenium. partly on the stage; that is is in the proscenium
They are not ant all satisfactory places from which to view the play. Indeed, one canno
she the center of the stage unless he sits in the



Secret Remedies.
 Sreatest evilis of modern timestedly among t
crecy the effective cloak on only is
he crecy the effeetive eloak of pure quackery, b
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only through the most extensive advertisinco
 peculiar kind-intended to lead the reader to
lieve that the inventor of the " great disocore
is an honest as well as able physician ; that is an honest as well as able physician ; that h
(the reader) himself is certainy inore
flicted with has home one of the ills deseribed in the
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 with the aid of a randon yuide pathould prove
nearly correct. The advertisenent or descrip-
tion of a secret remedy usually enymerates


 nee, or he might go so far as to actualy mate
soned inquiry into the matter, and change
nind of or the gross absurdities of thenlaim
he vendor might be exposed by intelligent ph ph
nent of patents
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the patent laws.
The defens.
hec patent to carry the title, in conformity with
The defenant, admitted the judgment and

 he Supreme Court of the District reversed the
decicion of the lower oourt, and , in arvery inter-
esting and exhaustive decision, held substantall esting and ex
as follows :
"/


 Tevised statutes of the United States; and in
deanul of such assigment within alimited dime,
will appoint a trustee, with authority to execute The seonid case oceurred in the Supreme e Court
California, Pacific Bank vs. Robinson, decided Calitornia, 18
pril 19 th, 1881
The oourt hel
The court held that "a patent right issued un-
der the laws of the United States may be required
be assigned to to be assigned to a receiver, under procecedings
supplementary to exeoution, who may sell the
supplementary to exeeution, who may sell the
sane and anply the proceeds in satisfiction of
judgment
Thus, although an ordinary sherifts sale of
Thus, athough an ordinary sheriff's sale of a
dethor', ppatent rimht would be good for nothing,
it appears from the foregoing cases, that, when
prond
appears from the forego oing cases, that, when
proper supplementary procedingrare taken, the
ourts inay compel the detizorito nake
 itors, or appoint.t receiver for the patent, whose
conveyance to the purchaser would be good.-
Scientific A merican.

Ten Cents Per Day.
In a recent lecture before the University of
California, the Hon. F . SWist a m member
He California, the Hon. J. F. Swift, a member
the the treaty oommision China, state tha
the boats or barges were towed from one certai point to an onther by Chineses; that it required
four doys to perform the trip and that the poon
foreatures who were made to do the work, which creatures who were made to do the work, which
in our owh happy country has never been done
by less than horse or mule, power, received for

 expenses of food, clothing, etc.
This is the reace of obengs whose labor some
are seeking to introuce, and which itself is
Strive
 operations, the rates of pay in China is doubt-
less greater, but allowng the same ratio of dif-
ference as exist between the compensation of ference as exist between the compensation o
mechaniss artisns, and common labor in our
and mechanies, artisans, and cesult would be about
own country, and the
TWENTY CENTS PRR DAX, or less, for Chinese me, $\xrightarrow{\text { ra }}$ in but in all sect to theial and rights as as human henects, shal warm to this goody land and drive out, or crush
lown to the olowest depths of poverty and deg. radation, those of our own race and blood who
recompelled to support themselves and their oved onese by yaily toill
Think of ;it, working
Think of it, workingmen of America, and
weigh the essues wellit The flow or chines
immigration must be thecked - substantially immigration must be checked - substantially
stoppedi-or before its torrentlike coming every
 meenhancal and hands must and will be made
country in white
lo trem mole.
tional numbers, and hey leagn Am Americican arts and and
devies more perfectly, they will make their
power felt, both in reference to labor itself, and
he management of great commercil ower felt, both in reference to labor itself, and
hhe manament of great commercial ,nanufac
uring, ayricultural, and mechanical interests

 they will assuruedyly becone aggressive, and wrest
from us the blessing whicg have made us a
great and happy nation.

Sanitary Inspection of Schools.
We wish our school boards would read and
ct on an editorial in the Boston Medical and
 'the esewage of the etamosphere," on, in orther
words, of air vitiated by humain lungs and bod




 riorate the constitution to the point of establish
ing disasess which sometimes produee death ometimes a lasting invalididm-making the
indiviuals
nexretehed- and sometimes simpl

 were appointed to the eose work of inspecening
chools. Their investigation extended to fonl


 recitations and time of study, means of regula-
tion of infectious diseses, with vacination,
directions for the training of children whose health was below the training of thilaren wes whe
that on one of the infetions diseases
theache the hight of an epidemic in Briussels since the
inspection began while othen cites of Belvium
suffered severely: The general health of the


## Salt as a Prophylactic in Diphtheria.

 In a paper read at the Medical Society ofVictoria, Australia, Dr. Day stated that having many years regarced diphtheria, in its early
 Mmpsition, he has trusted most to the free and their emplopment has been adopted from the
frst, and been combined with judicious alime
 salt possessese in preventing the putrefactive d
composition of meat and other organic matte
Dr
Daty has often presoribed for diphte
atient living far ory Dr. Day has often preseribed for diphtheric
patients living far away from medical aid the
requent use of a gargle composed of a atablepatients living far away from medical aid
frequent use of a a garle e emposed of a table
spoonful or more of sall
sissolved in a tumb spoonful or more of silt dissolved in a tumbler
of water giving ohildren who cannot agrgle a
teasoontul or two to drink oceasionally. easpoonful or two to drink occasionathy.
Adults to use the gargle as a prophylactic three
or four times a day. 188 UT Subscription price of this
882 will be $\$ 2.00$ in advance.

Proper Size of Vent Pipes to. Traps.
HARTforn, Noo. 2, 1881.
 York Bory trap be protected from syphonaye b


 in diameter is is suticient to protect a four-inch
or harser water-loset trap, why will not a half
or three-quarter inch weent awswer for a a basin or
 basin empties into a vertical line of sol pipe

- p pint ant above any other fixture, can there be
any question as to the efficiency of the smal vent.
IThe neesesity of providing Cor air pipicestr.
less size size than that of the waste pipes arises
fos thist the fact that air will






 ty, so hat we encounter four times four, or
tuteen times as much friction by forcing the

 it in in creses sro rata with the length of pipe
and is sensibly aggravated, too, by changes direction
Actual experiment has shown, when ordinary
lengths are used, that the snaller sizes of pipe would be insufficient to prevent syphoning
traps for the above ranosn. But still anoth traps tor exist in the reasons.ility of outlecting fro
reason ent
or ice from condensation of vapor inside the
 regulations. of the New York Boarto Hof He,
are quit justifible in this particular,
should be enforced.]-Sanitary Enginer.

Is there Life in other Planets? The question, so often mooted of late, appears
to be answered in the antimative by the discov-
eries of the eminent geologist, Dr. Hahn. In
 chondrites, on account of the peculiar spherical
enclosures found in them, he has reeently ob
entred served an entire esries of orranic remains.
and laborous procoss of frinding down and polish
a Lilaborous process ons, he succeeded in producing
ing these frament
a large number of thin lamine, or delicate stone
 of investigations under the most powerful mice
scopes. He has reeently published a book on scopes. He has recenty, pur thirty-two plates,
this subjet, containing, on the
miore than one hundred representations of these more than one hundrea representat which con-
lamine of eteoorites, very one of whine
tains different forms and figures, whihe ODr Hahn positively identities, not as memeralogital
but as organcic, and, in fact, as osological formatio but as orgatic, and ind in fact, as zoological formations
belonging to the different clases of sponges oor
als, and crinoids. These pictures, which have

of small or mean pretense, but based upon
brood and ocomperensive views and purposes
challenging the hearty aid and encouragement of broad and comprehensive views and purposes,
challenging hhe heart and and eneouragement of
overy individual seeking or desiring to attain inevery individual seeking or desiring
creased knowledge and information.
ALL ALoNR.
Thus far the work has been prosected almost
entirely single-handed. But few have assisted entirely single-handed. But few have assise
nn furnishing manter for these coluns, but
these few have been duly aceredited; and our theese few have been duly accredited; and on
own pen and brain have produced all not othe


 assistance me and intensely interesting to every
meacher batter that which is edifying and tinmade brigh
seacher aft
structive.

Crooked Things.
Because nature has crooked the channels
through which rivers run, and rivulets and
 seas, furnishes no barrier to men making them
straight, when
so dood purposes can be served by
soither is the natural crovededness



 the trimming and training employed in the their
cutloure and so may men trim that train their
thoughts and acts as to render themselves oria-

 those who linger in the valleys below.
Renewal and Payment of Subscriptions. We trust that every present subscriber will at
once renew his subseription, and each induce at once renew his subscription, and each induce
leaest five others who have not to subscribe. We
enean progression and improvement in our pub nean progression hape our friends will sustai
lication work and hond
us handsomely. Send $\$ 2$ for 1882 . Remit
 any other convenient means sil be dhy tw
knowledged. If postal stapps send the tw
cont en enination. We want a circulation
not less than not less than
20,000 PAYING SUBSCRIBERS.
bound Volumes for 1881 Will be ready for delivery by the 1 st of Janu-
ary, 1882 , at $\$ 2.50$. We.
We he he on
hand
fow ary, 180, and
copies of r180, an
to any address ?
Discovery of Extensive Pine Forests. The reeent exploration party of Colonel
Mercer up the Spanish River, in the province Mercer up the spanish River, in the provinies
of Ontario, is said to have discovere vast pine
forests, containing upward of $24,000,000,000$ forests, containing upward of $44,000,000,000$
feet of a superior quality of pine lumber, with
withe feet of a auperior quality of pine lumber, with
facilities for fetting it to market equal to the

THE CALIFORNIA ARCHITECT AND BUILDING REVIEW.

## Market Reports.

Lumber. - We prescnt the amended price list as adopted y the Lumber Association, November 10th. Pine lumber is scarce. There is not a yard in town that has a full supply of all the different lengthe. There will be a

## Receipt

Lamber.
Shingle
86,709,830


## Common Rough, up to 40 feet, per M feet <br> 41 to 60 51 to 60 61 to 70 71 to 80

$\begin{array}{r}. \\ . \\ .2350 \\ .23 \\ \hline\end{array}$
$\$ 2250$
2350
2480
26
50
28

Refuse Rongh................ planer 2 additional on Common Roug above rates, per M feet.
vo. 1 Flooring, 6 inches and over, " Flooring and Stepping and-under,-1.............................. 35 Rough Clear for Flooring, $\$ 1$ less than above rates. Ship Plank, Rough.

Deck Plank, Rough....

## Wool siats

Shakes...........
Redwood Posts

Fellows' new building in charge will help the builaing boom of 1882 ahead. Much has beon aly where Platt's Hall million-dols.
We have mentioned the above just to show the "pros pect for the coming year. We might enumerate many ings are realiy " going ahead."

Three-story frame dwelling, with brick basement, on Hayes, between Octavis and Laguna. Thom Wohrden; cost $\$ 13,500$.
Two-story frame dwelling, on corner Post and Scott Owner, Fred Hund: archite
Sylvester Grant: cost, $\$ 5,500$.
Two two-story frame dwellings on Taylor, near Ellis, and one on Ellis, near Taylor. Owner, J. Morton; architect
Kenitzor \& Raun; contractor, Chris. Chisholm ; cost $\$ 13,600$.
two-story frame dwellings, on Van Ness Avenue, be tween Hayes and Grove. Owner, P. R. Schmidt : architec P. R. Schmidt, contractor, W. Pluns; cost, about $\$ 10,000$. Six two-story frame dwellings on corner of Larkin and
Sacramento. Owner, H. Hinkle; days work; cost, about $\$ 5,000$ each $\$ 5,000$ each. near California. Owners, G. and H. Hinkle; days' work cost, about $\$ 2 ; 000$ each.
Two two-story and basement dwellings on Castro, nea Two two-story and basement dweling ( Owner, M. Jovell; days' work; cost, abou Marnot.
Brick building on Jessie, bétween Third and Fourth, to be used by the Electric Eig Curs; architects, Curlett \& Thornhill ; superintenat
Elisen; cost, about sell
Two story frame building for store and dwelling, on Howard, between Eighteeth and Nineteenth. Owner, Mr. Hayes; architect, Chas. Geddes; contractor, W. M. Fletcher; cost $\$ 3,000$. Wwo-story frame dwelling on Nineteenth, near Mission Wher, Wheeland; cost, about $\$ 2,000$. Post. Owner, 8 .
Repairs and alterations to honse 1356 Newman; architects Wolfe \& Son; contractor if A. Moar cost, about $\$ 1,500$.
Two-story frame dwelling on Lapidge, between Eighteenth and Nineteenth. Owner, J. Perry; contractor, J. McCann architects, Hoffmann \& Curtis; cost, $\$ 2,600$. One-story cottage on Noe, between Fifteenth and - ix contractor, H. Meyn: cost, about, $\$ 1,000$. Alterations and additions to building on corner of Powel and Ellis. Owner, I. Wormser; architects, Wright \& San Remodeling house corner of First and Harrison. Owner Binet ; cost, \$2,450
Two-story y uilding corner of Mission and Eighth. Owner D. J. Oliver ; architect, T. J. Welsh ; contractor, J. L. Binet cost, about $\$ 5,500$.
Corner of Vallejo and Webster, repairs to conservatory
Owner, Dr. Brigham ; contractors, Moore Bros.; cost, abou $\$ 600$. T. J. Welsh, architect. Alterations to building on Post, near Laguna. Owner Chas. Gottschalk; architects, Curlett \& Eisen; days' work.
Rebuilding house No. 35i First. Owner, Huntington Rebuilding house No. 351 First. 0
contractor, R. P. Hurlburt; cost, $\$ 2,650$.
Store-front and offlces on Fremont, near Mission. Owner, Reynolds \& Rix ; contractor, R. P. Hurlburt; cost, $\$ 750$. One-story frame building on Langdon, near Fourteenth.
Owner, R. Cummings; contractor, J.W. Wilcox; cost, $\$ 900$. Owner, R. Cumming building, with basement, on Church, between Twenty-first and Twenty-second. Owner and build-
er, F. G. Kieebauer; cost, $\$ 2,000$.
Market.
One-story frame and brick building on Spear, near Market. One-story frame and brick bullang on Spear,
Owner, A. Carrigan. Four tenement houses on Stevenson, between Eighteenth \& Curtis. ket and Main. Architects, Hoffman \& Curtis.
sacramento.
Alterations to building on corner of Second and J streets Owner, A. Gallatin; architect,
Carle \& Crowley ; cost, $\$ 10,000$.

## oakland.

In another column will be found a summary of building shown a very remarkable contro for the past yeay. preceding oue. It will well repay a careful perusal. It is pleasing to notice the joyous feelings with which the coming holiass are regar duen dullness reigned supreme in sll lines of mechanical operations.
Any one who has noticed our course during the psst year not to report any. building until the contract has been signed. This has been necessary in order to keep up to the stime to time, in the for this journal at its inception. From time to time, in the daily papers, reports of buildings about foundation whatever was had, except the street rumor, "I heard so and so onildings, both in number will wituess a large increase in The plans for Blythe's new building are about ready, and work will be commenced in January. Eost not far from $\$ 100$,$\$ 000$ Negotiations are in progress for several new buildings on Market street. Before the year 1882 is ended, it is probable that the new church for the St. Mary's congregation will have been commenced. Large improvements are con-
templated at the Oliff House. We have been personally in. formed of numerous improvements that will take place at formed of numerous improvements that will take place at
the "Mission." it is hoped that those having the Odd

Two-story brick building for stores and dwelling, o Thirteenth street, near Washington. Owner, Hamilton $\&$ Co.; cost $\$ 9,500$.
One-story cottage on Webster street, between Pacific and Webster street, between Paciac a
Owner and builder, G. B. Moore. berkeley.
Audubon street, near the University, two-story frame dwelling for
cost, $\$ 3,100$.
san jobr.
School-house nesr town. Owner, Orme School District contractor, D. L. Watson ; architects, Hoffman \& Curtis. los antos.
One and one-half story frame cottage, with stable. Arch

## bobs valley.

Two-story frame dwelling, with stable. Owner,
Ames architect, W. F. Smith; contractor, W. M. Fletcher; cost, $\$ 6,500$.
hivermone
Two-story frame bullaing. Owner, $O^{\prime} B r i e n$; architect, $T$. Welsh ; contractor, A. Pare ; cost, $\$ 2,481$

IED WOOD OITY.
Two-story frame building. Owner, Chas. Prior ; architect, . Laver ; contractor, J. Lenzen ; cos
mibcellankous.
Maxwell. - Two-story frame building for hotel. Contractor, J. O. White; cost, $\$ 2,200$. cottage. Owner, W. M. One and one-hale ; contractor, J. O. White; cost, $\$ 1,800$
Wicciams. - Frame building for a ohurch. Owners, or, Wm. Folsom ; cost, $\$ 2,800$.
Grand Island. - One-story Prame building. Owner, Annie Myers ; contractor, J. C. White ; cost, $\$ 1,20$. tractor J. O. White; cost, $\$ 1,200$.

## Publication Notices.

"Practical Lessons in Architectural Drawings, by William B Tuthill, A. M., Architect, published by Comstock, N. Y., i one of-ino mort pract contains 33 full-page plates of thu tratious (one in colors), and 33 wo of construction and representation.
"This book was suggested by the frequent call for a woork of
a restricted technical character, one which would give to the a restricted lechnical chame knowledge of geometrical drawings, student who already has some knowledge of geome hical work for the
the information necessary to property prepare his mechanic."
It may also be read with advantage by many practicing architects, who jndged by their delineations in construction, have as yet learned but little correctly.
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[^0]:    

[^1]:    

[^2]:    Plate No. 1. THE "HOLBROOK BLOCK," CORNER MARKET AND BEALE STREETS

[^3]: