THE DAILY RECORD-UNION.

ATURDAY............DECEMBER 16, 1882

Meteorological Observations — Taken at Signal Station at the Same Moment.

SACRAMENTO, December 15th, 1882—8:02 P. M.

Places of observation.	Hight of barom..	Ther....	Direction of wind, velocity	Character of wind force..	Rain in 24 hours...	State of the weather
Olympia....	......	..	....	....	.....	....
Portland....	30.21	51	Calm.	Calm..	.....	Cloudy
Roseburg...	30.23	46	E.	Light..	.....	Clear
Mendocino..	......	..	....	....	.....	....
Red Bluff...	30.24	47	N. W.	Light..	.....	Clear
Sacramento.	30.22	50	N. W.	Light..	.....	Clear
S. Francisco.	30.29	56	NW.11	Fresh..	.....	Clear
Visalia.	30.20	48	N. W.	Light..	.....	Clear
Los Angeles.	30.10	63	N. E.	Light..	.....	Clear
San Diego..	30.05	60	N. E.	Light..	.....	Clear

Maximum temperature, 58; minimum, 38

River above low-water mark, at 11 A. M., 8 feet 6 inches—no change in past twenty-four hours.

JAMES A. BARWICK,
Sergeant, Signal Corps, U. S. A.

THE WEEKLY UNION

Should be in every household, because it is a pure and entertaining journal, adapted to the varied tastes of old and young, the business man and the scholar, the agriculturist and the merchant, the mechanic and the day-laborer. It contains full and reliable market reports, home, foreign and Eastern correspondence, book reviews, puzzles, scientific selections, fashion quotations, political discussions, consideration of grave public questions, the fullest and most reliable telegraphic news, and generally is the complete newspaper. It is mailed to any address for one year for $2 50.

THE HOLIDAY NUMBER.

In accordance with its annual custom, the RECORD-UNION holiday number will appear on the 1st day of January, 1883. It will be a sheet of unusual size. It will contain a number of articles prepared especially for it by writers of the highest ability and of broad reputation as scholars and advanced thinkers. These will be on topics of profoundest interest to the people. It will contain statistics of the wealth and production of the State, the financial condition of the commonwealth, the record of births, deaths and marriages for 1882, local statistics, the current news, choice miscellany, market reports, and special articles of the highest importance and value to the reader. All the usual features of the regular edition will be retained. The holiday RECORD-UNION will be found to possess especial value as a paper to be sent abroad, as representative of this city and the State, and will form the very best medium for business announcements, as it will have an unprecedentedly large circulation. Special arrangements are being made to give that issue the widest distribution ever given any similar publication More detailed announcements as to the specific character and great value of the paper will be made hereafter, and in time to enable orders for extra copies to be filed.

THIS MORNING'S NEWS.

In New York Government bonds are quoted at 12⅞ for 4s of 1907; 113½ for 4½s; 103½ for 3½s; sterling, $4 81½@4 85½; silver bars, 108⅝.

Silver in London, 50⅝; consols, 100 11-16d; 5 per cent. United States bonds, extended, 105½; 4s, 123¼; 4½s, 116¼.

In San Francisco Mexican dollars are quoted at 87@88 cents.

Mining stocks were a trifle better in San Francisco yesterday. The advance from the lowest prices Thursday was from 5c to 50c in most of the Comstocks. Several, however, found no sale at either session of the Board.

A boy and his two sisters were killed by an engine Thursday night at Altoona, Pa.

In the trial of the grave robbers at Philadelphia two pleaded guilty, and the jury rendered a verdict of guilty as to the others.

In Graceville, Minn., John Callaghan was killed and his son mortally wounded in a row over the attempted arrest of the former by the Marshal.

Henry Bliss committed suicide in San Francisco yesterday by shooting himself through the head.

The Marquis of Lorne and party left San Francisco yesterday for Monterey.

John Redd (colored) was hanged for murder yesterday at Searle, Ala.

For killing a Mexican in Dakota James Leighton was executed at Deadwood yesterday.

A. Farkas, who was to have been hanged yesterday at Vicksburg, Miss., has been respited, pending an appeal.

Robert Ould, Assistant Secretary of War under the Confederate Government, is dead.

The reason given by a Chinaman for killing a fellow countryman in Chicago was that deceased was a d—d fool.

Martin Bulger and Nelson Pierce have been appointed Inspectors of foreign steam vessels for the port of San Francisco.

Five hundred prisoners, charged with incendiarism and massacres at Alexandria, have been released owing to insufficient evidence.

Westgate, the self-accused participant in the Phœnix Park murders, has arrived in England from Jamaica.

In the Sturla murder case at Chicago, the jury rendered a verdict of manslaughter, and fixed the punishment at one year's imprisonment.

A fire in Toledo, O., yesterday, caused a loss of $650,000.

The fire in Hickman, Ky., Thursday night, destroyed three blocks of the business part of the town.

Fire at Youngstown, O.

An uncle of the Emperor of Japan arrived in New York yesterday from Europe.

During the past seven days 208 business failures occurred in the United States.

There is a heavy freight blockade at Buffalo, New York.

Fred. Welkin was killed by a fall from a building in Portland, Or., Thursday.

Hans Hendrickson fell from the Government scow near Portland, Thursday, and was drowned.

A store was entered by masked men at Willcox, A. T., Thursday, and robbed.

Michael Killen, aged 62, died suddenly Thursday in New Westminster, B. C.

The Mint at Lima, Peru, is again working daily.

Bishop Paloof Ayachucho, one of Peru's most distinguished prelates, has been killed by Indians.

Patrick Joyce, Miles Joyce and Patrick Casey were hanged at Galway, Ireland, yesterday, for participation in the murder of the Joyce family.

The mental derangement of the Sultan of Turkey is becoming more apparent daily.

Four employes perished in a burning watch factory at Belfast, Ireland, yesterday.

A thousand troops left Cairo yesterday for Soudan.

Henley, the English telegraphic engineer, is dead.

An inch of snow fell in Arkansas yesterday.

Great damage has been caused in Oregon by high water, 10½ inches of rain having fallen in 48 hours.

A man has been arrested in Oregon for a murder committed in Oroville, this State, eighteen years ago.

Patrick Murphy was drowned near Las Vegas, N M., Thursday night.

Four residences were burned at Las Vegas, N. M., yesterday, an infant perishing in the flames.

A boy named Wilson accidentally shot and killed himself yesterday near Santa Rosa.

Miss Haley, 18 years old, committed suicide near San Jose yesterday with strychnine.

The convention of farmers adjourned *sine die* at Chicago last evening.

A Longfellow Memorial Association has been organized in San Francisco.

William Simpson and Mrs. D. Belisle died suddenly in San Francisco yesterday.

A jealous barber at Dubuque, Ia., while shaving his rival, slashed his nose off with a razor.

The condition of Congressman Orth, of Indiana, is growing more critical, and it is believed he will last only a few days longer.

Special attention is called to the inside pages of to-day's RECORD-UNION.

A PHILADELPHIA paper is in an agony of nervous fret over the Westernisms of some of its contemporaries of the boundless prairies. Such violations of the laws of pure diction as "inquested," "suicided," "orated," "demised" and the like affect the sensitive taste of the polished East, and cause an outpouring of criticism that should bring relief as tears do to overburdened hearts. But while the Atlantic critic has truth on his side as to the contortions of language at the West, he forgets that his own section is quite as much at fault, and that the Eastern press presents solecisms quite as outrageous. The truth is that the tendency to use slang and to "manufacture" words is a growing one among the reportorial fraternity, and correct writing is giving way to a species of smartness, the wit of which is supposed to dwell in the twisting and deforming of good English. Both East and West the writers on local papers need correction in this respect.

THE QUESTION OF A NEW PAVILION.

The State Agricultural Society has its headquarters at the capital of the State, as is proper. It has for many years promoted annual expositions of the products and industries of the State and coast. Bids have, in the past, been frequently made by other localities for the removal of the annual fairs to such places. This is what always happens to a State fair, and always will happen. Although the law, by making the Agricultural Society a State institution, has delocalized it, and its expositions, there remain those who will continue to urge its removal, forgetful of or indifferent to the fact that wherever located it must be of some local benefit, and therefore a constant subject for the claims of those who desire such benefits to inure to their own locality. But the obligation imposed upon a city by local benefit such as stated may be discharged. In the past Sacramento has done her full duty in this respect. Through her liberality the Society has had free use for more than twenty years of a pavilion for the annual fairs. Through her agency and the liberality of her citizens the Society, for the State, has acquired ample and unexcelled stock and parade grounds. On more than one occasion the people of this place have come to the financial aid of the Association. The Society, in its late rapid growth, has now need of fitter and more spacious pavilion accommodations—a new pavilion, indeed, is an admitted necessity. Thus a new obligation arises, and Sacramento is in duty bound to discharge it fully, and suffer no reproach by its neglect. That she will balance the account promptly we have no doubt. Her duty in this respect is to be measured by a large proportion of the cost of a new structure. There remains, therefore, to be considered, only the character of building needed, and the best method of raising the required sum of money that shall be found to be Sacramento's just share of the burden.

The great depot buildings erected by railway companies would appear to be among the best models for a pavilion. They combine great areas, with strength and lightness of structure. They afford the advantages that are incident to a single-span roof and the absence of internal pillars. They are graceful in architecture and economic in cost. Such buildings admit of increase of floor area by the introduction of galleries. Their hight gives them very nearly perfect ventilating facilities, while they may be more easily lighted than almost any other class of buildings. If this character of building should be agreed upon, it would be wise to make it cruciform, that the transepts may be occupied by distinct divisions and departments of the expositions, leaving the center to be lighted from above, and the chief promenade and the focal point of the building. Whatever form or style of building is resolved upon, it must be, architecturally and in all other respects, in keeping with the character of the uses to which it is to be applied and the dignity of the State.

As to the method to be employed to raise the amount of money this people should contribute toward the proposed structure, it should be a speedy one, and should as equally as possible distribute the burden among all citizens. It cannot be expected that the State will aid in the work until Sacramento has shown, not only its willingness, but its determination, to respond with a contribution proportioned to the anticipated local benefit. When she shall have her money in hand, she will be in a position to ask the State to do equally as well for its society.

The benefits to this place to flow from the enlargement of the work of the State Society consequent upon the increase of its accommodations for exhibitors, whether they be large or small, will be common to all property owners in the city. Each should therefore bear his due proportion of the expense to be visited upon us, and the non-resident owner must be made to feel that it is as much a duty on his part as it is on the part of the resident. In the past, as is well known, the non-resident owner has generally escaped from all such burdens. To appeal to the generosity of a few, and to ask them to contribute in greater proportion than others, is unjust, and while their acquiescence might be deemed a fine example of liberality it would still be a fact that truest liberality is found in exact justice. That method by which all may contribute in proportion to their interest and the common benefit is the best method. Let the Board of Trade, for instance, ascertain the cost of the desired building, and subtract therefrom the value of the present pavilion owned by the county of Sacramento, and which is ready to contribute that value to the fund for a new pavilion to be owned by the State. Let the Board then take up the city assessment roll as a basis for the ascertainment of the amount that each property owner should contribute toward the remainder of the sum to be raised. The desired result will be arrived at by determining the per cent. upon the total amount of the assessed values in the city necessary to produce the sum that Sacramento should contribute. This having been ascertained (after a due allowance for a liberal margin), the contributions should be at once called for. We believe that the responses would be satisfactory—certainly the justice and equitable character of the scheme would appeal with force to every intelligence. It is simply a proposition to measure the burden by the benefit, and distribute the former fairly and justly among all who enjoy the latter. It may be replied that there will be refusals, and they are entirely probable, but there is no reason whatever for supposing that they will be so great in number as under almost any other system of solicitation. Refusals would, under this plan, be less defensible—indeed wholly indefensible. The man of moderate means, will feel that while he is contributing in proportion to benefit received, the wealthy man is doing the same, and that the property representing large aggregated capital, corporate institutions and non-residents, is being called upon on precisely the same basis. By this plan also a large number of people will be reached, and their limited contributions received, who are seldom approached on ordinary occasions for subscriptions to public works of this character. The plan will involve less labor than the usual one of personal solicitation, and which always operates unequally, and therefore unjustly. What is needed is speedy action, that the State Society may go to the Legislature with Sacramento's evidence of its willingness visible and in hand, and not be compelled to offer promise instead of performance.

THE MISSISSIPPI LEVEES.

The river and harbor improvement bill which passed at the last session of Congress, but which failed to receive the President's sanction, contained an item of $5,000,000 for the construction of levees along the banks of the Mississippi river to protect the reclaimed lands lying along its borders from overflow. The measure is wholly indefensible on any tenable ground of national necessity, because it is not a proposition to preserve the navigability of the river or to create a new channel in the interest of commerce. The lands to be reclaimed and benefited by the proposed expenditure of public money are private property. The values to be created are to inure to the benefit of individuals. It is not good political ethics to take the money of the people of Maine, Florida, California and other remote States to be expended in creating values in the hands of individuals living along the Mississippi river. One of the arguments relied upon by the friends of the bill, and used to promote its passage, was to the effect that the river belonged to the nation, and hence it was the duty of the nation to keep it within its banks or be responsible for the damage done by its overflow. This is treating a river by principles applicable to the ownership of a breachy cow. The question is: What constitutes the natural bed of a river? Clearly a river must have water way for its water at all stages. Rivers do not maintain exactly the same stages at all seasons, and their flood maximums are as much the result of natural causes as their low-water stages. The reclamation works along the banks of all rivers are encroachments upon their natural water ways. If the Government owns the Mississippi river it certainly should be accorded the right of way for its river at all stages. All attempts to reclaim lands, which would otherwise be overflowed at certain stages of a river, are simply in the nature of taking possesion of lands which are a part of the river channel at flood stages. But even admitting the doctrine to be true, then it follows that the Government is responsible for damage due to the overflow of all navigable waters. This would make it the duty of the Government to reclaim all lands lying along the margins of all the navigable waters of nearly one-half the North American Continent, for the benefit of the private individuals owning these lands, and also make it responsible in damages for all injury inflicted by the breakage of levees, and consequent injury to all personal and real property. In fact this is the logical sequence of argument, and it will sooner or later be invoked by the people of the regions whose lands it is proposed to reclaim. If the Government is under obligation to build the levees along the banks of the Mississippi, it is equally under obligation to maintain them, and consequently liable for damages arising out of any lack of diligence in such maintenance.

Another argument relied upon to justify this audacious measure related to the enormous values to be added to the taxable property of the commonwealth by the proposed reclamation works. If this is good as applicable to the property of individuals residing in the States of Mississippi and Louisiana, it is equally cogent as to private property in other sections. If the Government will reclaim effectively all the overflowed lands of the San Joaquin and Sacramento valleys; construct reservoirs for the storage of flood waters of all mountain tributaries of the two main rivers of the State; conduct such waters in canals at sufficient elevation along the foothills of both sides of the Sacramento and San Joaquin valleys to admit of their use for purposes of irrigation, it would at once confer upon 12,000,000 acres of land a value of at least $100 per acre, and thus add $1,200,000,000 to the taxable values of the commonwealth. The arguments used by the promoters of this gigantic Mississippi river scheme prove too much. Every obligation resting upon the Government as relates to the people of the Mississippi reposes with equal weight as relating to the people of every other section. The full application of the doctrines invoked to justify this gigantic wrong would convert the Government into a vast commune, attempting to do for the people all things which should be done by and for themselves. The Government possesses no resources not derived from the people. Its treasury contains no money that does not belong to the whole people. It cannot, therefore, expend money in the creation of values which, when created, are to be the property of private individuals, without robbing all sections not sharing in the immediate benefits conferred by the moneys so taken and expended. It should be plain that the robbery of one section to benefit another is a measure of wrong counterbalancing all benefits.

AN INTERESTING TRIAL.

In Kansas City some time ago a mob hanged a negro named Harrington for the alleged shooting of an officer. The day following this lynching it was conclusively shown that Harrington was innocent. The real offenders were discovered and dealt with according to law. One M. V. Jones was leader of the mob which hanged Harrington. For inciting to that deed of lawlessness and for the death which resulted, Jones was indicted for murder, and his trial closed yesterday by a failure of the jury to agree. This involves the necessity of a new trial; but it is scarcely to be hoped that Jones will be convicted by a Southwestern jury. There is, in fact, a lingering barbarism in public opinion throughout the country that an execution by a mob is not murder. This error is fostered by the loose thinking and thoughtless advocacy of mob law by men and journals when under a state of excitement due to the commission of some great crime. But even under ordinary circumstances there still remains in the public conscience a sentiment justifying murder by mob law. Such murder has to the popular conception something of the sanction of a legal execution. Recently a San Francisco contemporary, in discussing the restoration of law and order to the territory of Arizona, attributed the improved state of society there to the free application of lynch law and the lawless sway of mob rule. The same journal referred to this proceeding as an indispensable remedy for certain lawless conditions of society, and claimed that lynch law had played an indispensable part in civilizing the territories and protecting frontier society. Nothing could be further from the truth than this species of assumption. It is altogether absurd to say that lawlessness under any condition of society is necessary to the development of civil order. When there is an undue proportion of the lawless element in frontier society, what is needed is greater vigilance and activity on the part of good citizens in the support of the law. Such effort would be directly in the line of natural evolution in the development of civil order. In Jones' case there was no room for doubt in the mind of the jury that he had incited the mob to hang Harrington, or that Harrington was an innocent man; but there evidently was a feeling in the minds of that jury that to hang the leader of a mob would be a bad precedent, as tending to discourage the mob method. In short, that jury must have regarded the right of Jones and his associates to hang an innocent man without trial as a kind of public duty, and that society would lose one of its most valuable correctives for lawlessness if mob rule was thus signally condemned. The case serves to show how much remains to be accomplished in the way of correcting the barbarous tendencies of society before we can claim to have achieved any high ideals of civilization toward which the great ideas of self-government should constantly tend.

THE LODGE BUSINESS.

A contemporary, in considering the temptations to which young men are exposed, advises them, in order to dispose of their evenings, to "join a lodge," and points out the advantages that accrue from mutual-aid associations and confraternities in general. Abstractly it is well for young men to have membership with their fellows in organizations that are intended to secure them against the rainy day; that cultivate the benevolent impulses, and teach the truths of mutual dependence and duty. But practically the matter has a phase that is decidedly objectionable—it develops the tendency to unite with many orders. Very largely the lodge business is overdone. The call it makes upon time that should be given to home and the family is very often too great, and results in injury to the person, and not unfrequently leads to the lodge being preferred to the hearthstone. The man who is a member of many orders must find his efforts in all weakened by the very division of thought and labor required. There are many wives and children who have grievous cause of complaint against the lodge. As a rule the man who is faithful in one or two well-conducted organizations is better off than he who spreads his energies over so broad a field of fraternity and benevolence represented by the "lodge," as to absorb time that is due to the home circle. The animosity that many wives and mothers feel toward the lodge grows out of this fact. The tendency in latter years to unite with a large number of "orders" is one that does not benefit. Some organizations have realized this fact, and are considering measures to restrict their members in this direction. Home and business are jealous of all rivals, and will not brook them. It is better advice to the young man to say to him that it is well enough to be a lodge member, but it is bad to have membership in many. He should have the time that he devotes to a number of fraternities for social intercourse in non-lodge circles, for good reading, for home and its pleasures and duties, and for exercises that will contribute to the culture of his mind and body—and lodge duty very seldom does either of these. The subject is capable of elaboration and the analysis of still other grave considerations, but may be concluded for the time by repeating the warning to resist the temptation to unite with every new order that presents its invitation.

A SIGNIFICANT REDUCTION.

The postal appropriation bill, now before the House of Representatives, contains the usual item of appropriation for the star route service, but reduced $2,700,000 from the bill of last year. While the bill was under consideration in the House on Thursday McMullen called attention to the reduction, but there was not a Congressman to arise and say that the reduction was not warranted. How is it that the star service is enabled to get on with nearly $3,000,000 less per annum than one year ago, and over $5,000,000 less than two years ago? The significance of these reductions is unmistakable. They show that whoever the guilty parties may have been, it is plain that during Hayes' administration the stealings in this department of the mail service must have amounted to many millions per annum. These reductions go on unchallenged by any who are prepared to say that the star service is not just as efficient and adequate as under Brady and Dorsey. The prosecutions begun under Garfield's administration by Postmaster-General James and Attorney-General MacVeagh have already borne very profitable fruit to the country, and, even if there should be finally a failure to convict anyone, it is now becoming apparent that the Government will be the gainer of millions by the exposure of the thieving devices of the former administration of the postal service. The Star route thieves may successfully evade conviction before Washington juries, but the Star service, divested of their baneful influence, remains to be administered, and its administration is proving that millions were wasted, if not stolen, as the signal reductions of the past two years clearly indicate.

RIGHT THIS TIME.

It seems to have dawned at last upon the people of San Francisco that the local criminal repository there, known as the Industrial School, is a burdensome luxury. To guard 177 youthful offenders, says the *Post*, it costs the city the pretty sum of $19,500 per annum for salaries of officers. Thereupon it urges the disestablishment of that reformatory, which it is admitted has failed of its purposes, and desires instead, that a State Juvenile Reformatory be set up. As an argument in its favor, it urges, with force, that through such an agency the neophytes in crime may be prevented from becoming hardened criminals by the associations of State Prison life. So far as this branch of prison reform is concerned, and the duty of the State to adopt preventive measures against the criminal education of young offenders, there can be no issue. All well ordered States act upon that principle; California stands almost alone in her method of cultivating youths for criminal graduation. This journal for years, persistently and with unanswerable force, presented the subject to the people, while San Francisco journals have either ignored it or lacked the intelligence to discuss it. San Francisco should remember that this State some years ago made an effort in the direction now indicated by the *Post*, and did found a State Reform School. But it was disestablished, and San Francisco influences were the most active of all in that accomplishment. It is fair to assume that that initial effort would have attained by this time a position approaching nearly to perfection had it been given a serious trial. But however wrong San Francisco may have been in the past, and notwithstanding the fact that probably eight-tenths of all youthful offenders whose reformation should be attempted through the agency of a State Reform School, would be drawn from her population, it must be conceded that what she now asks is right. The duty of the State is neither abridged nor excused in the premises by reason of that fact.

A SERIOUS QUESTION.

High authority charges that the adulteration of drugs has grown to be a monstrous evil. We might abide sand in our sugar, endure water in our milk, and even be beguiled by the economical considerations that dwell in butterine, but really the world of trade should afford us guarantees against the spurious in those compounds intended to correct the results of our physical indiscretions or misfortunes. Seriously, there is cause for governmental investigation into the matter. Men are not awake to the facts. They receive their prescriptions from their physicians with all confidence that the apothecary will dispense the required drugs, and not supply their places with spurious and non-effective compounds. But this confidence, we are assured, is greatly misplaced, and that in nothing is there more ease of adulteration than in the drugs of every-day use. The difficulties are apparent at a glance that environ the patient in detecting these adulterations—in fact he can rarely do so, even if inclined. It appears, too, that our druggists are not always at fault, for they are compelled to take what the manufacturing chemist presents, though they are not wholly free from blame, for by combined effort they could effectually crush out spurious articles and those that have been tampered with. On their behalf it is claimed that this cannot be done except by the aid of the law, and the more conscientious apothecaries are agreed upon the necessity for such legislation as shall prevent mere tyros from engaging in the business of compounding and dispensing, that the learned and skilled may be encouraged in the vocation, and such alone as are capable of detecting adulterations. There is reason in this. He who deals in poisons and in drugs of general use should have a thorough education in pharmaceutical science, and the highest order of skill in that line be required, as is the rule now in several European countries. The subject of drug adulteration is one of the gravest import, and medical science, says an English journal that has given the matter special attention, has before it no more serious problem than that involved in the question, "How "can the people be insured genuine medi-"cines?" It is a question, singular as it may seem, to which there has as yet been made no satisfactory answer, and no reply that even suggests a practicable solution of the difficulty. Says one writer, "Adulterated food may provoke disease, "but assuredly adulterated drugs will not "cure it." In all the literature of medicine we find very few contributions on this subject, but the testimony is abundant that drug adulteration has reached an alarming degree of prosperity.

A STRANGE SECRET.

Bockel, the official custodian of the Keely motor secret, says: "I use no ex-"travagance of language when I assert "beyond question that both men of science "and of practical engineering skill alike "would stand amazed to-day if they "realized what Keely has already accom-"plished." Mr. Bockel may be conscientious in that belief, but it is certain that his expression will not inspire any greater faith in Keely's invention. This is a practical people, and they are disinclined to take anything for granted. Not only do they desire to verify the cook's praise of the pudding by the eating test, but they are not then always satisfied that the sense of taste is not deceptive. We certainly hope Keely has made a great discovery; that it will prove all he claims for it, and that he may "amaze the men of "science," but he has as yet utterly failed to show any good reason for his secrecy. If he has discovered the operation of a new force, he could suffer no harm by stating the principle. The law is ample to protect him in his proprietorship, and his fearfulness about the whole matter is just what has begot public distrust. Other great inventors have not found it necessary to surround their work with such profound mystery. Notably in point is the case of Mr. Edison, whose principles of operation have not been matters of secrecy, though the details of performance have frequently been withheld. If it is said that Keely's invention is nobody's business but his own, to that blunt statement of fact it may be responded that he should not then ask the public to place faith in his scheme until it is made good by the testimony of works, and this is just what he has done for years. Human trust is demanded at times of all men, but Mr. Keely has no claim to exact it in this case.

A PROMISED EXPOSITION.

Preparations are now being made for the opening at Chicago in May next of what promises to be a most important and valuable mechanical fair. It is to be a national exposition of railway appliances. Railwaymen, inventors and manufacturers generally, have given the scheme warm approval, and that is accepted as a safe indication that the exposition will result in practical benefit to the railway and manufacturing interests of the country. It may be safely predicted that this fair will prove one of the most curious, and at the same time profoundly interesting of exhibitions. Railways have called into exercise the highest inventive genius, and developed the most marvelous mechanical skill, and the grouping of examples of their results will make up an exhibition which must attract universal attention. Not the least interesting feature of the affair will be the scientific tests that are to be made of the leading exhibits. A guarantee fund has been raised that insures the financial branch of the scheme, and the profits of which will be given in prizes, and donated to railway service benevolent purposes. Such men as ex-Governor Fairchild, of Wisconsin; Geo. M. Pullman, of the Palace Car Company; Aaron French, of Pittsburgh; E. H. Talbot, Chicago; E. V. Cherry, Cincinnati; and A. G. Darwin, of New York, with a score of others of like high reputation, constitute the managing commissioners, with their headquarters at Chicago.

OPEN LETTER TO THE ELECTORS OF SACRAMENTO.

I take this method of addressing you about the sewerage of our city. The RECORD-UNION has called our attention to the subject frequently and earnestly. Still, nothing is done. I wish to address you as one of you, having the same interests as you have, and moved by the common good. This is a time of unusual sickness from diseases which are attributed by physicians of all schools to malarial causes, or defective sewerage, or both. True, this sickness is not confined to Sacramento or California. But these causes are not confined to Sacramento, and it is no reason why we should be indifferent to the causes of disease which may be prevented, because others neglect them. We are openly tolerating causes which ought, by all known laws of health, to produce disease. The causes from malaria I will not speak of, only those connected with sewerage.

The open canal below the city carries putridity and death in the light of the sun. The contents, as if to punish us as much as possible, move during the sickliest portion of the year with almost imperceptible current, just enough to let loose the seeds of disease; and, as if this were not enough, there are many places where they spread themselves out in infectious pools, marshes and lakes—fresh breeding places of fevers. This slow-creeping current of death moves against the prevailing winds, which take these exhalations, and bring them back to the city to sniff. Yet the city sits calmly, Cleopatra-like, with this viper fastened by its fangs to her bosom, hanging away down her waist, and injecting fresh poison into her veins with every southern breeze.

But the mischief of the canal is by no means at its hight. It is rapidly filling up with the materials of breeding putridity and impregnating the banks. In a few years the whole region south of the city will be as fatal to human life as the Campagna of Rome in its worst days. Already in certain conditions of the air the stench a half a mile away from the canal is intolerable. So much the more virulent in the coming years will be the poison the impure air will inject into the veins of the city. If this outlet for our sewage is to be continued, by all means let the canal be covered or be changed for pipes.

But this is not the only source of disease, nor the worst. A large part of the sewage of the city is stored away in permanent vaults and cesspools close to the houses, impregnating the soil and making the very foundations on which the city stands noxious, and in many cases open connections exist between these breeding places of disease and the residences, thus not only filling the general air with the evil influence, but conducting it into the houses. Single families, separate and alone on the plains, that use these connected or near vaults or cesspools for a number of years are liable to be invaded by typhoids, diphtheria, scarlet fever or other fatal diseases from that cause. No city that longer tolerates them within its borders can escape sore punishment.

We need, fellow-citizens, a new system. Every house, barn and shop should be connected with a sewer, and all the fecal and fluid and semi-fluid waste matter should find its way into it and thence be speedily removed from the city.

The pneumatic system is advocated by some; and I have no doubt, if adopted, it would prove effective. But it involves great immediate outlay, and a total and abrupt change of all our existing works and substitution of new ones.

A better way, I think, for us would be to have a cistern and a pump for the discharge of the sewage into the river, as I suggested in an open letter to the Trustees of the city two years ago. The cistern, for the sake of the easy discharge of its contents into the river and to afford sufficient fall for the sewers, should be situated somewhere near Second and T streets. It should be water-tight, sunk some thirty feet below the surface of the ground, and come up as high as the top of the levee. Then let the pipe with which all the sewers are connected enter the cistern some twenty feet below the surface of the ground. This pipe, running on the north side of R street and deflecting to the cistern at T street, is the only one that would need to be made new at once. Into this the present sewers could discharge their contents. The city could take its time for reconstructing the sewers through the city to the new and effective grade. The cistern, moreover, might have an air-tight cover, so as to have the working of the pump produce a suction of the air down the sewers, and prevent the escape of sewer gas into the city. There might also be a syphon pipe, to permit the surface water in the district below R street to enter the cistern without permitting the air to enter.

The pumps should discharge into a pipe which terminates below the surface of the river, or the arrangement might be made to have a discharging pipe, in time of low water, pass through the levee, and save pumping the contents of the cistern so high. In this way the sewage would quickly disappear from the city, and be lost and neutralized in the water of the river, as is the sewage of all the cities and towns on the banks of the Mississippi and its tributaries.

This outline presents a plan which is practicable, not expensive, might be at once adopted, and would give us the advantage of having a system to work towards at our leisure.

I. E. DWINELL.

Sacramento, December 14, 1882.

FOR GOOD BUTTER.

EDS. RECORD-UNION: Your remarks this morning on oleomargarine were quite amusing, but you can assure your readers, in this community especially, that it is not likely that they will be "afflicted" with oleomargarine, at least until dairy butter brings better prices and all dairymen make nothing but choice butter. There is always plenty of second-grade butter to take its place and supply all demand for a cheap article, and merchants generally are not favorable to the introduction of any substitute. If the Legislature can pass an effective law for the regulation of weights of two-pound rolls, let them go farther and pass an Act compelling every dairyman to make only choice butter. But the dairymen are not wholly to blame for putting up short weights, nor do they get the benefits. They invariably sell to dealers at actual weight, and the commission merchant does the same to the retailer; and the retailer usually is compelled by competition to sell at so small a profit that very many times he gains only the difference in weight—buying and selling at the same figure. "Competition, the life of trade," will not allow short weights or any deficiency in quality without corresponding reduction in prices, or loss of trade. Then it would be almost impossible to make a mold that would make all grades of butter weigh exactly alike, as butter differs in density, and the same dairyman would have to use a different mold at different seasons—good butter being heavier in summer, or with good feed. Such things usually correct themselves, and legislators, I think, could employ their time to better advantage on other subjects.

FOR GOOD BUTTER.

Sacramento, December 15, 1882.

CHRISTMAS STORY.

In the Christmas number of the RECORD-UNION will appear a Christmas story, written for this journal by one of the most talented and popular of European novelists. It will be complete in that number, and will probably occupy between fourteen and fifteen columns. It will be found to be a deeply interesting romance, strong in character sketches, powerful in its descriptive phases, and to have a plot most natural and of thrilling interest. It will in all respects be the leading and most attractive Christmas story published in any news journal of the country

The farmers are busy seeding nearly all over the State, and there is an almost general complaint of a scarcity of labor.

THE TRANSIT OBSERVATIONS AND LONGITUDES, RECTIFIED BY A. G. GODDARD, C. E.

SACRAMENTO, December 15, 1882.

With regard to the vexed question of longitudes, and the correct time of the several contacts during the transit of Venus December 6th, I believe the whole matter can be reconciled something as follows: It appears that we cannot exactly adopt the Signal Service longitudes in another paper. For instance, Professor Davidson's Observatory on Clay-street hill and Octavia street, where Captain Gilbert (in charge) took the observations, is in longitude 122d. 25m. 41s., as determined by Professor Davidson a few years since, whereas the Signal Service still call San Francisco 122d. 26m. 15s., which was what Lieutenant Trowbridge made Lime Point, in San Francisco Bay, in the Coast Survey of 1853 54. It gave the relative time from Greenwich 8h. 9m. 45s., while Prof. Davidson's Observatory gives it 8h. 9m. 42.733s., or about 2¼s. difference in time. But the Signal Service Washington longitude of 77d. 1m. is much more out of the way from the Dome Observatory. It is true that it has been variously computed at different times from 77d. 0m. 15s. to 77d. 8m., which may be found in Black's atlas, published in 1871; but Johnson's cyclopedia, 1877, and Loomis' astronomy give it 77d. 2m. 48s. If we take the relative difference, however, of the late eminent and lamented Dr. Draper's computation of his observatory at Hastings, near New York, which in his transit of Mercury observation, May 6, 1875, he gave as 73d. 52m. 25s., or 23h. 47m. 18s. in time, calling Washington 24h. The difference, 12m. 42s., is equal to 3d. 10m. 30s., which, added to 73d. 52m. 25s., makes 77d. 2m. 55s. That is doubtless very nearly correct. But special observations for longitude or time from Greenwich, after the electric Atlantic cable was laid, were taken by Dr. Gould, Professor Hilgard and another, which give a mean of 5h. 8m. 12.12s., convertible to 77d. 3m. 1.8s; so probably that is most correct of all, and is our starting point. Then if we deduct 5h. 8m. 12.12s from Professor Davidson's observatory—8h. 9m. 42.733s.—we have 3h. 1m. 30.613s. as the difference between Washington time and the Clay-street observatory, or, if we please, deduct 77d. 3m. 1.8s, Washington, from 122d. 25m. 41s., Clay-street, giving 45d. 22m. 39.2s., these should give the same results in time, or show that the Atlantic cable observations were not connected with the same part of Washington. It does give us the same result, or 3h. 1m. 3.6s. for difference between Washington and the Davidson Observatory. Therefore if we take the given predicted Washington time for the transit, and deduct the difference, we shall have the predicted time for Professor Davidson's Observatory in San Francisco, Captain Gilbert's place of observation—not, of course, the Cerro Roble, N. M., station, where Professor Davidson had such admirable success—except, however, the first contact, which his station seems to have missed, as the sun was less than a diameter above the Orzau mountains, at the first internal contact, as the *Bulletin* stated. Well, then, the prediction for Captain Gilbert stood:

	Washington.	San Francisco.
First contact............	8:55 A. M.	5:53 56.4 A. M.
First internal contact..	9:16 A. M.	6:14 56.4 A. M.
Second internal contact..	2:38 P. M.	11:36 56.4 A. M.
Last contact............	3:00 P. M.	11:58 56.4 A. M.

But there is an admirable chart in Proctor's "The Universe and the Coming Transits," showing that ingress is retarded eight minutes at about 108° longitude, and egress accelerated three to four minutes on our coast, and five minutes at about 104° longitude. The second internal or third contact was not due at 11h. 36m. 56.4s., but at the same figure we must ascertain. It is not quite clear, however, that the eight minutes or even seven and a half minutes' retardation extends further than the diagonal path shown running from about Wyoming to the Gulf of California, but it undoubtedly indicates important differences, which may clear up the observed differences at San Francisco and Sacramento. Captain Gilbert recorded his observation of the second internal contact at 11:42 A. M. and the last contact at 12h. 2m. 10s., showing 5m. 3.6s retardation at the third contact, and 3m. 13.6s. at the last contact from the Washington predicted time. But it appears that the well-known medical almanac of Dr. Jayne, Philadelphia, gives the time for thirty-one cities in the United States, including Sacramento and San Francisco, and 11:42 A. M. is given for San Francisco, and we may note that if we deduct three minutes' acceleration from eight minutes' retardation, it leaves the retardation five minutes, or within 3.6s. of the observance, or taking the last contact and deducting 3½m. acceleration from 7m. retardation, it would give us 3½m. retardation, which would be within 3.6s. of the last contact observation at San Francisco. A very little alteration in the proportions of the acceleration and retardation would give the exact results, therefore. I have dwelt upon the San Francisco observations because they afford the key to the correctness of Major Bender's at the State Capitol; but now, then, we must ascertain what the longitude of our State Capitol is. Professor Hall kindly informs me that it is 27.85 miles less or east of 122d. true longitude. At 38d. 35m. Sacramento latitude that would give us 121d. 29m. 7.4s., while the Coast Survey in 1878 ordered 1m. added to every degree of old longitude, showing that formerly it would have read, after adding the 1m, 121d. 30m. 7.4s. The Signal Service figure—121d. 31m.—appears to be too much. Adopting 121d. 29m. 7.4s., then, as the longitude of the State Capitol west of Greenwich, the difference from San Francisco is 56h. 33.6s.; for adding that to my computation of the dome of the State Capitol—121d. 29m. 7.4s.—which has never been given by any civil engineer before, we have 122d. 25m. 41s. for Professor Davidson's Observatory on Clay-street hill. It must be recollected that the Coast Survey Office, Washington square, San Francisco, was called in longitude 122d. 24m. 35.49s., but no doubt should have been 122d. 25m. 35.49s. The 56m. 33.6s. gives us 3m. 46.24s. difference of time, or later than San Francisco, so that, as we found before, that the San Francisco, or Captain Gilbert's observation of 11h. 42m. came out right with the proper retardation added, and conformed to Dr. Jayne's almanac; so if we add 3m. 46.24s., Lacour difference of time, to 11h. 42m., we have as a result 11h. 45m. 46.24s., which includes the same retardation as we allowed for San Francisco, and this comes out 13.76s. only less than 11h. 46m. given in Dr. Jayne's almanac. The observation was in fact called as explained last week, at 11h. 42m. 45s., San Francisco time; adding 3h. 46m. 24s. therefore, we have 11h. 46m. 31.24s., showing that Major Bender was probably 31.24s. late, as he was confident he was, and even admitted, 13.76s. more, which would make the actual occurrence precisely what I estimate it should have been, 11h. 45m. 46.24s. My mode of getting the true retardation was only approximate, however. The last contact would work out as follows: Captain Gilbert's was 12h. 2m. 10s., with probable retardation of 3m. 13.6s. included. We have then merely to add the difference of our time, 3m. 46.24s. to 12h. 2m. 10s., making 12h. 5m. 56.24s. The actual time Mr. Shearer called to Major Bender was 12h. 2m. 25s., by San Francisco time; adding, therefore, 3m. 46.24s. The Sacramento time called was 12h. 6m. 11.24s., showing a possibility that it was called fifteen seconds too late to be in harmony with Captain Gilbert's. Thus, then, we have arrived at conclusions that harmonize with science and the facts, and prove the correctness of Captain Gilbert's observations. Professor Proctor's elaborate descriptions and chart for the transit of December 6, 1882, and the really admirable precise figures given by Dr. Jayne's Almanac, for which his astronomer is deserving of the public thanks, whereas the *Scientific American*, if it quoted from the Nautical Almanac, which I have not yet had an opportunity of seeing, still only gave us the Washington time without the retardation added, and was consequently misleading. It was only a few days since that Dr. Jayne's Almanac was brought to my notice, which, together with Proctor's chart, I believe clears up the whole mystery, now that I have ascertained the various longitudes of Washington, San Francisco, and our own State Capitol, which have never been given to the public before. I have labored with zeal and a determination to master the question, and have the satisfaction, at least, that "truth brings its own reward," and some, at least, of the public, I am sure, will appreciate my endeavors.

Reports from South Africa tell of a financial collapse arising out of the mania for ostrich farms, which took possession some time ago of all sorts of members of the community. Those who could not pay cash gave bills which were discounted by the banks, but the bills fell due before the feathers were grown, and birds bought for $500 a pair were sold at $150 and less. In the way of hunting up new schemes to get broke the South Africans seem to have beaten the record.