THE DAILY RECORD-UNION.

THURSDAY.....MARCH 1, 1883

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

SACRAMENTO, February 28, 1883—8:02 P. M.

Places of observation.	Height of barom...	Thermom...	Direction of wind	Character of wind force...	Rain in 24 hours...	State of the weather
Olympia....	30.30	49	Calm	Calm..	.09	Cloudy
Portland....	30.32	48	W.	Light..	Spkl.	Cloudy
Roseburg...	30.27	56	Calm	Calm..	.....	Clear
Mendocino..	30.20	57	N. 22	Brisk..	.....	Clear
Red Bluff...	30.21	59	S.	Calm..	.....	Clear
Sacramento.	30.16	64	N.	Light..	.....	Clear
S. Francisco.	30.16	61	N. W.	Light..	.....	Clear
Visalia.	30.14	63	N. W.	Light..	.....	Clear
Los Angeles.	30.10	65	N. W.	Light..	.....	Clear
San Diego..	30.06	63	N.	Light..	.....	Clear

Maximum temperature, 72; minimum, 46.

River above low-water mark, at 11 A. M., 10 feet 10 inches, a fall of 1 inch in past 24 hours.

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

Weather Probabilities.

WASHINGTON, February 28th.—For Pacific coast: Generally fair weather.

THIS MORNING'S NEWS.

In New York Government bonds are quoted at 110½ for 4s of 1907; 113½ for 4½s; 103¾ for 3½s; sterling, $4 82½@4 85½; silver bars, 110⅞.

Silver in London, 51d; consols, 102 3-16d; 5 per cent. United States bonds, extended, 106; 4s, 122⅞; 4½s, 115½.

In San Francisco Mexican dollars are quoted at 87½@88 cents.

Mining stocks were quite soft in San Francisco yesterday. Nearly all the Comstocks showed a decline of from 5c to 50c per share as compared with Tuesday.

Hank Monk, the veteran stage driver who brought Horace Greeley into California, died yesterday at Carson, Nev.

Alexander Head was killed yesterday in San Francisco by a fall down an elevator shaft.

The Montello train robbers all pleaded guilty at Elko, Nev., yesterday, and were sentenced to the State Prison.

William Sheehan was seriously injured near St. Helena, Napa county, yesterday, in a runaway accident.

An unknown man was found dead near San Mateo yesterday morning.

A libel suit against the *Oregonian* for $25,000 damages, on trial at Portland, Or., was yesterday decided in favor of defendant.

Eight cars were wrecked near Dallas, Tex., yesterday, one man being killed and two wounded.

In a railroad accident near Palatine, Ill., yesterday, one child was killed and several passengers injured.

Fire in Paris, Ky.; also near Livermore, Alameda county.

Riotous demonstrations continue on the Chicago and Evanston Railroad at Chicago.

Mrs. Sarah Pearson shot and killed Edward Daley at Columbus, Mo.

Nevada wants an appropriation of $250,000 from Congress to sink artesian wells in that State.

George H. Taylor & Co., a large paper and printing firm in Chicago, have failed.

J. D. Watson is on trial at Columbus, O., for attempting to bribe an Assemblyman.

A magnificent new iron steamship is being built to run between San Francisco and San Diego.

A severe earthquake shock was experienced in Rhode Island Tuesday night.

Senator Tabor is to be married in Washington tonight to a Chicago widow.

The Duke and Duchess of Edinburgh have arrived in Berlin.

Mrs. B. Calvert was drowned near Warren, Mo., while attempting to cross a stream on horseback.

Ex-Speaker Randall declines service on the Tariff Conference Committee.

An 11-year-old boy arrived in New York yesterday from Portland, Or., having traveled the entire distance "all by himself."

The silver wedding festivities of the Crown Prince and Princess took place in Berlin yesterday.

John Fleming, a convict, walked out of the jail at Oroville yesterday, and is now enjoying his freedom.

In the Cummings murder trial at Nevada City, arguments were concluded yesterday and the case given to the jury.

The Massachusetts Assembly—127 to 60—defeated the bill to give female citizens the right to vote and hold office.

Revenue officers seized and destroyed two snuff mills on Long Island.

W. M. Davidson, a member of the Arkansas Legislature, drowned himself yesterday at Little Rock while intoxicated.

A train last evening ran over and decapitated an unknown man near Fresno.

W. E. Burrell, a school teacher, was thrown from a horse near Santa Clara yesterday, and killed.

A daughter of the Chief Justice of the Supreme Court of Illinois has taken the veil at Chicago.

Carver and Bogardus will again come together in a shooting match next Saturday in Chicago.

During February 62,651,440 pieces were coined at the Philadelphia Mint.

In an accident on the Oregon Short Line near Shoshone Tuesday night, three men were killed and several others wounded.

Only 13 miles remain to complete railroad connection between Salt Lake and Denver.

Charles H. Cate shot and fatally wounded a woman in Lawrence, Mass., yesterday, and then killed himself.

The Cotton Exposition building at Louisville, Ky., will cover 15 acres of ground.

Ex-President Diaz of Mexico has arrived at New Orleans.

The supplemental extradition treaty between the United States and Spain has been ratified by the Senate.

The State Senate spent most of the day yesterday on the Senatorial apportionment bill, and the Assembly on the Drainage Act claims.

HIGH LICENSE.

The Common Council of Chicago has just doubled the tax for retail liquor licenses. Even then it was not raised as high as was demanded by the people, but it was a great step in advance. The increase secures Chicago additional revenue to the amount of $188,700. The *Inter-Ocean* says if the Council supposes the people will be satisfied it is mistaken sadly. They demand a high license, that will limit the number of poisoning doggeries, and make liquor contribute a fair share toward the expenses of government. Here in Sacramento, where everybody wants high license, where the better elements in the liquor business favor it, where we have need for lower water rates and more money, and where the inequitable merchandise license is an admitted wrong, there should be no hesitation about doing that for which there is full authority—that which will increase the revenues, abolish merchandise licenses, in no wise affect the question of the city indebtedness, decrease the low doggeries, lessen police expenses, insure lower rates of taxation, and generally benefit the people.

A FRANK ADMISSION.

The showing of the shipments by rail from Kern county has completely demoralized the fanatical press. There is no answer to be made to the exhibit. The Kern county *Californian*, in a labored defense admits that the stock was shipped by rail, but attributes it to the fact that the rates were nearly equivalent to the cost of driving. That is the pith of the whole defense, and certainly the railroad company needs no better argument in its own behalf.

THE ARM OF JUSTICE.

It would seem that no one can read the testimony of Rerdell and not be satisfied that the rascal is telling the truth. There is a consistency about his story that cannot be readily given to falsehood. The truth is that the star route conspirators are being brayed in a mortar, and the public wrath will continue to wield the pestle until the last of them have done more than penance for their unholy transactions.

THE Bodie *Free Press* says: "It strikes us that those papers whose stock in trade is their anti-railroad sentiments do occasionally run the thing very deep into the ground. We believe in keeping the railroads within the control of governmental authority, and we believe in the exercise of that authority in all proper ways. But we do not believe in throwing unnecessary obstacles in the way of railroads, nor in constantly nagging and annoying them with unfriendly legislation, whereby they are harmed and the public not benefited."

AN OLD QUESTION NEWLY DEBATED.

In the *North American Review* Henry George has a paper on the use of money in elections. There is an absence of the ingenuity that usually characterizes the papers of this versatile and capable writer, who has the courage to speak his convictions. Instead of analyzing the political question, he bemoans the undenied corruption, and exhibits very strongly his partisan feeling. The subject is a trite one, but the opportunity was afforded him for handling it in a new and interesting manner. Mr. George recites that large sums are spent to secure offices that return inadequate rewards; that in agricultural districts, as well as in city wards, votes are openly on the market; that in some sections the vote of an entire district is for sale, and that these practices are sadly demoralizing. Of all this every one was before aware, and by his statements Mr. George adds nothing to the impressiveness of the facts. We look in vain through his essay for a remedy for the evil that is worthy to be considered as a corrective. That our system brings money into politics is true; that rich men, with no other qualifications, aspire to political honors, is true; that ring managers select the heads of tickets, and that voters have little choice save as between these, is true. All this, if it needed to be told, we had from the scholarly and forcible Professor Winchell a month prior to Mr. George, on the same page he now fills, and in a manner that was forcible and effective—a marked contrast to the very ordinary effort now under consideration. Before either Winchell or George, the press of the country had thoroughly discussed the subject. In this journal it has been a topic upon which we have earnestly and frequently dwelt. The country lacks nothing in the line of information as to the uses of money in politics and the serious menace that use constitutes to republican institutions. Prof. Winchell points out what he believes a specific for the ills, in a limitation of the right of suffrage to the virtuous and intelligent. Mr. George, on the contrary, would apply a lotion that may alleviate, but cannot be deemed remedial. His plan is, in short, to throw some additional safeguards about the secresy of the ballot to assure the independence of the voter; to have all ballots printed by the State, and these to contain the names of all candidates as registered officially by all who desire to "run" for office; to prohibit torchlight and other political processions; to punish for introducing the grog-shop into politics; to have halls for public political discussions furnished by towns and precincts for use of candidates at cost. This synopsis fairly covers the essential features of his entire plan, which is not original (as several of its features have been tried by different countries, as he points out), and which, while containing valuable suggestions, does not probe the political sore to the bottom, or promise a healing. As between the plans of Winchell and George, that of the former is far preferable. It strikes at the root of the evil, and the only question at all deeply involved in it, perhaps, is one of accomplishment. But Mr. George suggests methods for avoidance and defeat by the unscrupulous, and means for the conduct of campaigns and elections, to be defeated by the forces that make political management a business. In short, Mr. George's paper is but a reindictment for old offenses, with the counts formulated in a style a little more lugubrious than usual. In so far as the paper invites to and aggravates public discussion of this important question it has value, for out of its consideration by the thinking masses we shall see arise, sooner or later, a system that will abolish the abuses which unquestionably exist, for we are by no means disposed to join in the croaking of Mr. George and his fellow-prophets, that "we are driving toward oligarchy and Cæsarism in a new form." We have ulcers on the body politic and evils that must be corrected; but a republican form of government will rise equal to them and a democracy be preserved, or else our civilization is a failure.

ABOUT THE COMPLAINTS.

Thus far every complaint examined into before the new Board of Railroad Commissioners has been shown to be trivial. In the first case, the passenger took the advice of a hotel runner as to the time of stoppage of a train at a station and was by the train left—nevertheless, the company offers to make good his trivial damage. In the next, it is shown that the rates between points in the central sections of the State and about the bay of San Francisco are not exorbitant, as was charged, but are as reasonable and as low as is consistent with the present cost of operation. In the remaining cases the principle is pointed out, as an answer, which always has and always will prevail, that the competitive rate between terminal points is not, never was and never can be the proper standard for the value of services rendered between intermediate points not in competitive relations with other places or competitive lines. Lastly, that there are lines on which steamer rates between given points are lower than by rail between the same points, for large and small lots alike, and for the very good reason that, under the Constitution, when the transporter lowers his rates for small lots to the competitive points he is compelled to afford intermediate places in the same direction, though not enjoying competitive advantages, all the advantages accruing to the competitive points, and as such rates are not the true measure of value of the service, the railroad freighter is compelled to yield the through traffic to his water competitor—a law, by the way, as cruel and unjust as it is discriminating and in violation of true business principles.

MISPLACED SYMPATHY.

A miserable wretch in Chicago beat his wife with the buckle end of a strap until she was dead. Now that he is in the clutches of the law, he is crying aloud for mercy, claiming that he was "chastising the woman for her good, and did not mean to kill her." Strange as it may appear, a mawkish sympathy has been manifested for the brute, because he was under the influence of liquor when he murdered the mother of his children. The time has gone by when there should be extended to the drunkard sympathy for the miseries he brings upon himself by his appetite. If men will prime themselves with whisky, to work diabolical deeds, let them not shield themselves behind the beverage they abuse. For the people who work up a sickly, sentimental sympathy for guzzling wife-beaters and murderers, society should express its contempt and abhorrence. There is not, and can not be, such a thing as martyrdom to appetite.

THE Governor has pardoned a man who has been imprisoned in the Penitentiary for nearly three years for a crime of which he was wholly innocent. That man should be paid by the State a good per diem for every day he labored for the State in prison. California has made payment in such cases heretofore, and the precedent, therefore, is set—as in the case of the Hoehn robbery at Santa Rosa about the year 1880.

RAILROAD COMMISSIONERS' REPORT.

The third annual report of the Railroad Commission is now being issued from the State Printing Office. It is a volume of about 600 pages, and is signed by Messrs. Cone and Beerstecher, General Stoneman having resigned after his election to the office of Governor. It is to be regretted that General Stoneman did not deem the subject of transportation of sufficient importance either to sign the report of his colleagues or to give a reason why he could not do so.

The discussion of the problem of railroad transportation by the two remaining Commissioners occupies a large portion of the report, and it shows an amount of careful study of this intricate and little understood subject that ought to commend it to the favorable consideration of the farming and commercial community. Under the Constitution, the Board of Railroad Commissioners is invested with supreme power over all transportation companies or individuals engaged in the business of transportation. The judicial character with which the office is invested will naturally tend to conservatism in the execution of the trust committed to the Board. A brief allusion to the railroad legislation in this State is made, and a synopsis of the history of railroad legislation both in England and in several States of the Union is given. As to the responsibility for the exercise of the powers conferred upon the Board by the organic law, they refer the reader to extracts from the report of the first Board of Commissioners of Transportation in 1877, which would appear to be unanswerable. Of complaints of shippers, the experience of the present Board is a repetition of that of their predecessors. Upon the subject of establishing inflexible rates, the Commissioners have found, in the language of the first report made upon the subject of transportation, "that it is obvious therefore that charges for transportation must be based largely on commercial laws and market values at home and abroad, and are to a great extent independent of the question of cost, and that, as the elements are variable, the charges must be varied, according to the circumstances of each case."

This is the experience of every Railroad Commission that has been created. The attempt to establish an inflexible relation between shipper and carrier has always failed of its object, and is the real cause of the alleged antagonism between production and transportation whenever such a state of affairs has existed. It is the law that creates the antagonism, and when the relation between carrier and shipper is not interfered with by attempted legislation, the question will adjust itself in accordance with natural commercial laws, to the satisfaction of both parties.

The Commissioners have investigated the causes of the troubles in some of the Western States a few years ago, and find almost without exception that the endeavor to enforce inflexible statutes, regardless of conditions and circumstances, was the principal reason for those difficulties. In the matter of reducing rates the Commissioners have found that more could be accomplished by amicable interposition than by arbitrarily establishing a reduced maximum. This is the universal experience wherever governmental supervision has been tried.

In the discharge of their duties the Commissioners have endeavored to see that the rates charged were just and reasonable. This the shipper and carrier both are entitled to. The voluminous tables of reductions in the appendices will show to what extent the Commission has been instrumental in bringing about this result. The Commissioners have searched the reports of the Royal Commissions of England and Board of Trade of Liverpool for precedents to guide them in their study of this intricate subject, and find therein reason and full justification for the conservative policy which they themselves have pursued.

The subject of "discrimination" is so thoroughly and clearly discussed that there is little left of what has been deemed by partisan newpapers and speakers a "crying evil." Surely those who have endeavored to make political capital out of a judicious discrimination in regulating transportation rates have shown that they were lacking in that faculty which would enable them to judiciously distinguish between different things. Competition and natural conditions are the causes of the discrimination between places, and no discrimination under similar circumstances between individuals has been brought to the notice of the Board.

The subject of local rates and classification of freight are treated in a manner to convince any reasonable person that a judicious classification of freights is a great and necessary element in overcoming many discriminations which are the result of natural conditions.

A careful review of the tables and statistics given in the appendices will be of great service in dispelling the mist that has been thrown before the eyes of the public by politicians, for selfish purposes. Politicians generally are not large shippers or extensive travelers, and yet they have much more to say about the wrongs of the people than anybody else. But the responsible government authority over transportation finds the real shippers are not the complainants. The chapter on interstate commerce is exhaustive upon that subject. The complications that must naturally arise between the Federal and State laws in relation to rates are clearly and pointedly presented. The reasons given ought to be sufficient to cause Congress to hesitate before experimenting upon a policy which will eventually cause more dissatisfaction to shippers and producers, as well as carriers, than to let the subject alone, and the natural laws governing transportation to regulate themselves.

To merely touch upon the various subjects discussed in the report is all that can here be attempted. To every candid business man, the report, it would seem, will commend itself, because it discusses the subjects in their various phases from a commercial standpoint and in a practical way. The extent of the "public use" of private property, as shown by the Commissioners, will suggest to every one whose dealings are with the public, that, except for taxable purposes, or in some great public emergency, such as war, famine or pestilence, private owners can manage such property much more economically and satisfactorily than public agents.

After three years' careful consideration of the transportation problem as presented in this State, the Commission have reached the conclusion that the apparent inequalities in rates are due to competitive forces set in motion in the struggle for commercial supremacy at the great trade centers, and that the attempt to prohibit or to regulate these agencies by government is an attempt to control the enterprise of business at such places. This is the verdict of nearly every transportation commission that has been permitted to live long enough to investigate the question thoroughly. In fact, as the Commissioners truly say, railroad history, like all other history, "repeats itself." All the questions that arise between shippers and carriers are judicial in their character, and should be settled on a basis of justice to each. This no legislation can accomplish.

What is said of terminal facilities in San Francisco should receive such consideration at the hands of the Legislature as its merits demand. Without intending it, the Commissioners appear to have presented in the case cited as to cost of transferring freight in San Francisco, a conclusive argument against an attempt to fix the rates by rail, or otherwise, a strong argument in favor of regulating transfer charges by freight-handlers and draymen. In cases of this kind if the interest of the people requires that railroad charges should be fixed by Government, why should not the people demand that the charges for transferring by draymen and truckmen be fixed by Government also? The conclusion presents itself as inevitable, that if the charges of the former be established by law, so also should be the charges of the latter. In any event, it is dealing in values, and the same right exists, if at all, in the Government to establish the value of the shippers' produce as to fix the value of the carriers' service in transporting it. The report should be extensively circulated and carefully read, when the self-reliant and fair-minded public will form its own conclusion.

THEY WERE ACQUAINTED.—He had evidently been "fired." He came through a saloon door on Marietta street like a comet on a wildcat schedule, and when he hit the pavement the people all around the block thought the cupola had fallen off the State Capitol. A crowd gathered around him as he reassembled himself, and a policeman said: "You got the g. b.?" "Yas," he drawled, in capital letters a foot long. "Who did it?" "Barkeep in there," pointing to the saloon door. "What for?" "I thought the danged old shebang had changed hands—but it hadn't!" The meeting lost further interest in the case.—[Georgia Major.

THE first real skin cure ever discovered was Dr. Benson's Skin Cure. It cures all rough and scaly skin diseases and makes the skin smooth and healthy. It is an ornament to any lady's toilet.

NOT AN experiment or cheap patent medicine is Brown's Iron Bitters. It is prepared by one of the oldest and most reliable chemical firms, and will do all that is claimed for it.

SKINNY MEN.—"Wells' Health Renewer" restores health and vigor, cures dyspepsia, impotence. $1.

RUSSIA SALVE is unrivaled for its speedy healing qualities. Ask your druggist for it. Price, 25 cents.

UNIVERSITY FIELD EXPERIMENTS.

Unfortunately the report on the experimental work at the College of Agriculture for the last two years, which should have been out some weeks since, was overtaken in the State Printer's office by the rush of work attendant upon the legislative session, but the results as to field experiments with bone meal, as reported by C. H. Dwinelle, Lecturer on Practical Agriculture, can now be given, and it is believed will be of interest to many of our readers. The statement of method of making the experiments, and tables, are necessarily omitted for want of space.

As is to be expected on an undulating piece of land such as the one under where the experiments were made, with variety as to exposure, depth and composition of soil and drainage, there is no uniformity in the results from the use of a given fertilizer. In the western series, plot 4 shows a gain of 1.76 tons of hay as compared with the average of 3 3/8 and 4 1/2. At $15 per ton this gives an increased value of $26 40 per acre, gained at an outlay of $4 87 for bone meal applied, and 48 cents interest for one year, in all $5 35, leaving a balance of $21 05 profit. It certainly looks as though it paid to keep up the fertility of that soil.

The account with this plot for three years is stated about as follows:

Increased value of crop of 1878-79, wheat and straw, per acre	$ 8 28
Increased value of crop of 1879-80, oat hay, per acre	30 24
Increased value of crop of 1880-81, wheat hay, per acre	26 40
Total increase in three years	$64 92
Cost of bone meal, at 600 lbs per acre, in 1878	$9 75
Interest for one year	97
Cost of bone meal, at 300 lbs per acre, in 1880	4 87
Interest for one year	48— 16 07
Profit in the three years	$48 85

The soil in this part of the experimental grounds is somewhat better than in some other parts, but it is by no means deep, nor what would be called a choice piece on most farms. The main reason why it shows more effect of the bone meal than others seems to be, that there is more moisture to act as a solvent.

Plot 8 does not show any remarkable gain, although it is better than the average.

Plot 10, which was dressed for the first time with bone meal, gave but 1.93 tons per acre. This is exactly the yield of all the unmanured plots in this series. The soil of this plot is mostly very shallow and subject to drought, so that no amount of fertilization is likely to force it into great productiveness in any ordinary year.

In the eastern series, table III., plot 1, of wheat, keeps up its old record of responding to good treatment by giving an increased crop of 0.68 tons of hay per acre, of the value of $10 20. This returns the outlay with interest, and leaves a profit for the year of $4 85. The three years' record of this plot is as follows:

Increased value of crop of 1878-79, wheat and straw, per acre	$11 76
Increased value of crop of 1879-80, oat hay, per acre	6 12
Increased value of crop of 1880-81, wheat hay, per acre	10 20
Total increase in three years	$28 08
Cost of bone meal at 600 pounds per acre in 1878	$9 75
Interest one year	97
Cost of bone meal at 300 pounds per acre in 1880	4 87
Interest one year	48—16 07
Profit in three years	$12 01

The corresponding oat plot (1) was injured by small birds when the crop of oats was maturing in 1879, so that its records are defective. As far as the figures are definite, the result was as follows:

Increased value of crop per acre in 1878-9, oats and straw	$1 90
Increased value of crop per acre in 1879-80, wheat hay	3 00
Increased value of crop per acre in 1880-81, oat hay	8 82
Total increase in three years	$13 72
Cost of two dressings of bone meal and interest	16 07

This leaves an apparent balance against the land of $2 35 per acre. In 1879, when the oat crop was lessened by birds, the stand of straw was so good that it would be safe to say that there should have been at least ten bushels per acre more of oats, worth $1. With this allowance, the bone meal has a little more than paid for itself, so that any increase which it may produce in the future will be profit. Plat 6, which had formerly been dressed with gypsum, with no marked benefit, was given a full dressing of bone meal at the rate of 600 pounds per acre, costing $9 75, and interest 97 cents, in all $10 72. Comparing each one with the adjoining plats, 5½ and 6½, having similar soil, we find in the wheat plat the increased value of the crop is $9 15, leaving $1 57 to be made up on the next crop, while in the oat plat the increased value is $11 76, giving a clear profit of $1 04 the first year.

A careful review of the field experiments with this fertilizer leads to the conclusion that it is admirably adapted for renewing some of our soils which have been impoverished by injudicious cropping. We may even go farther, and say that some soils at present giving good crops could be dressed with bone meal with a very decided increase in the net profits derived from their cultivation. Very striking illustrations of this have been given in the Garden of Economic Plants, at the University, which has a black gravelly clay loam, quite different in character from the clay soil of the ridge on which the above experiments were made. There, not only cereals, but beets, turnips, onions, Jerusalem artichokes, etc., respond most satisfactorily to this fertilizer.

It is encouraging to note that instances of the profitable use of bone meal by our practical agriculturists on a variety of soils are multiplying. Thus Robert Ashburner, of San Mateo county, uses it on the very light soils of his dairy farm on forage crops, marigolds and maize, followed the next year by wheat for hay. Some vineyard and orchard owners are finding that bone meal is a tonic which will keep vines and trees in good heart, so that their fruit shall be abundant and fair. When their example is more generally followed we shall hear less of the "running out of varieties" and "changes of climate," which render horticulture unprofitable.

To be sure this is all in accordance with the teaching of agricultural science as developed in England and Europe, but as Californian experience it has its special value. It should go far towards destroying the somewhat prevalent idea that the natural laws which govern vegetable nutrition, and consequently profitable farming, are different here from what they are in other parts of the world.

Without going deeply into the chemistry involved, the value of bone meal as a manure may be briefly stated as follows: The glue and other animal matters furnish nitrogen in a quickly available form. The lime in combination, although not so active as that from the kiln, is similar to it in its effect upon vegetable nutrition. It is phosphoric acid, however, which gives bone meal its special value the world over, and particularly in California.

Some may claim that if it be proved that bone meal is what our lands need to save them from bankruptcy, the available supply is far below the large areas to be treated. The reply to this is, that there are now two factories in San Francisco where bone meal is produced; but that they are not overrun with orders from within the State is too evident from the following, taken from a recent letter from the proprietor of one of them: "We are having a very steady demand for our fertilizers, principally from the Sandwich Islands. They are used on the cane lands with good results."

It is to be hoped that the time is not far distant when the results of the practical experiments now being made by the Agricultural Department of the State University, as shown in the report now in the State Printer's hands, will be acted upon by our farmers and producers from the soil generally, and that our manufacturers of fertilizers will not need to turn to the far-off islands of the sea to find a market for their bone meal and kindred enriching products, which should all, and more, be employed in keeping up and improving the plant-producing quality of the fast depleting soil of our own broad fields.

A PUBLIC BENEFACTOR.—Dr. W. S. Wood justly deserves this title, being the originator of Dr. Wood's Liver Regulator, a positive cure for indigestion, dyspepsia, sick headache, bilious fevers, etc. This favorite remedy has many friends here. Druggists.

THE only iron preparation that does not color the teeth, and will not cause headache or constipation, as other iron preparations will is Brown's Iron Bitters.

NEW ADVERTISEMENTS.

WANTED—ROOMS AND BOARD IN A PRIvate family, by a man and wife; permanent. Address, stating terms, AL., this office. m1-1tf

WANTED—BY THE CAPITAL PACKING Company, 200 women and girls to work in their factory the latter end of March. Those desirous of work will please call and give their names in at the office, 1 69 Front street. m1-6t

LOST—AT THE MASQUERADE BALL LAST evening, a Gold Quartz Locket. The finder will be suitably rewarded on leaving at the office of Capital Hotel. m1-1t*

FOR SALE—ONE BLACK STALLION, 6 years old; weighs about 1,500; stock, saddle or single; and a roadster; will sell cheap for cash. You can see him 16 miles from Sacramento, on the Placerville road. A. H. THOMASSON. m1-18t*

CATARRH.

Its Nature, Symptoms, Consequences and Cure.

By Dr. Lighthill

FROM NEW YORK CITY.

Office: 328 J Street, Sacramento,

(Over the California State Bank.)

EDS. OF THE "RECORD-UNION:" MY ATtention having been directed to the great prevalency of Catarrh in this region of country, and the desirability of some information on a subject so important to the public welfare, and with which I have familiarized myself by a life-long study, I submit to your readers, with your permission, the following remarks, the result of actual observations acquired in a very EXTENSIVE PRACTICE, devoted largely to the investigation and cure of the complaint under consideration. Hoping they may prove of interest, as well as benefit, I remain, yours respectfully,

E. B. LIGHTHILL, M. D.,
No. 328 J street, Sacramento,
Rooms 11, 12 and 13.

THE NATURE OF CATARRH.

Among the list of chronic diseases which affect the human frame, Catarrh is the most prevalent, most offensive, most productive of disconfort, and most liable to a variety of dangerous and distressing complications. Though popularly supposed to be a mere local complaint of the nostrils, it is in reality a deep-seated, complex and often a malignant disease. It is one of the most important and frequent causes of consumption, and so often productive of deafness, that a high medical authority recently affirmed that were it not for Catarrh there would be but few cases of impaired hearing. It inflames and weakens the eyes, impairs or destroys the senses of smell and taste, gives rise to the development of Bronchitis and Asthma, affects the mind and nervous system, renders the breath impure and offensive, and thus often isolates the sufferer, and renders him an object of disgust to himself and others. Occasionally, it spreads from the cavities of the head and nose to every organ of the human body lined or enveloped by the mucous membrane, and may thus in time affect the stomach, liver, kidneys, bowels, bladder and uterine organs. It was this important character of Catarrh and its alarming prevalence that first attracted my attention and induced me to give the subject my special attention. In 1855 I first published the result of my investigations, and ever since then it has been my special object to familiarize the public mind, through lectures and the medium of the press, with the nature, tendency and destructive consequences of Catarrhal disease, and to awaken that interest in regard to its timely and judicious treatment which its importance demands.

DISCHARGE FROM THE HEAD.

Catarrh manifests itself by a discharge from the head, varying in its nature in different cases, and even in the same individual at different times.

It may be a thin, colorless, acrid fluid, or a glairy, starch-like substance; generally, however, it is a thick, purulent matter, either greenish-yellow, or of a deep green tint, occasionally streaked or flecked with blood. So copious and offensive is the discharge in many cases that the patient feels as though his whole head was in a state of corruption.

Much of the discharge drops into the throat, necessitating frequent expectoration, or collects as a tough, viscid, tenacious phlegm behind and above the soft palate, in the passage between the throat and head, embarrassing respiration and creating a constant and almost irresistible desire to draw the mucous into the throat so as to eject it by the mouth. This practice, popularly known as "hawking," is characteristic of Catarrh, and proves as embarrassing to the one affected, as it is disagreeable to those around.

Again, the offensive matter deposits itself in the nasal cavities in the shape of dry incrustations, which, in some cases, accumulate to such an extent as to form an actual plug in the nose, obstructing breathing and producing serious discomfort, often accompanied by a foul, fetid, putrescent discharge from the head and the expulsion by the nostrils and throat of large masses of offensive matter or flakes of incrustations, greenish-yellow in color, purulent in character, and of an indescribably fetid and disgusting odor. Ulcerations are sometimes met with in such cases, which, if unchecked, may attack and destroy the bony structure of the nose, resulting in serious disfigurement of the face.

OFFENSIVE BREATH.

As a natural consequence, in nearly every case of Catarrh the breath is more or less tainted, but sometimes it is so revoltingly offensive as to render the sufferer an object of disgust to himself as well as to others. Again, cases are occasionally met with, as already shown, in which the stench is really overpowering, and sufficiently fetid to poison the atmosphere of a whole room. Thus, a person affected with Catarrh lives continually in an impure atmosphere of his own creation, and inhales a poisonous effluvia with every breath.

OBSTRUCTION AND ITS CONSEQUENCES.

In Catarrh the mucous membrane of the nose becomes swollen, infiltrated and thickened, thereby narrowing the nasal passages and causing the nose to be stopped up, sometimes on one side, sometimes on the other, and often on both, rendering respiration through the nose either difficult or impossible. In some cases, tumors, polypi and other morbid growths spring up in the nasal passages, often blocking up the nostrils to such an extent that not the least breath of air can be forced through the affected side. In all such cases great susceptibility to changes of the weather is experienced, cold and damp weather having a particular tendency to augment the difficulty. When so affected the patient is obliged to breathe, more or less, through the mouth, a practice fraught with very dangerous consequences, for a current of cold and impure air thus constantly traverses the air-passages, and with all its irritating qualities is conveyed into the delicate structure of the lungs, while disease germs of every kind may thereby readily find their way directly into the blood and circulation. In children the consequences are still more disastrous, as it retards the development of the lungs and thereby stunts their growth, dulls their intellect and gives them a stupid appearance. It also renders them more liable to attacks of diphtheria and other dangerous throat affections, and is apt to impair their hearing.

HEADACHES.

Headache is a frequent symptom and result of Catarrh. Sometimes it merely amounts to a feeling of weight, fullness and discomfort above and between the eyes, but occasionally actual and severe pain manifests itself on top or back of the head, in the temples, or in the face, resembling neuralgia in its intensely painful character, severe dizziness being at times associated with this condition. In fact, many cases of chronic or persistent headaches, which are supposed to be of a nervous or bilious character, are really the product and effect of Catarrh, and yield readily to treatment directed to that complaint, while resisting all other efforts.

AURAL CATARRH—DEAFNESS.

Catarrh is one of the most frequent causes of deafness. This fact is fully recognized by all aurists of repute, and is of itself of sufficient importance to direct public and professional attention to its timely removal. The late Dr. Ed. M. Curtis, who was so deservedly held in the highest esteem in this community, in a paper read before the Medical Society of the State of California, in 1873, entitled "How We Become Deaf," gives as his experience that "at least nine-tenths of all the cases of trouble of hearing that he had seen on this coast had been from this one source—that very prevalent and annoying disease Catarrh—which has a variety of causes and assumes a number of forms," and his experience is fully corroborated by my own. Scarcely any one afflicted with Catarrh for any length of time has acute or absolutely normal hearing. With some the hearing suffers at first only by spells, the ears becoming obstructed with each accession of cold, but by degrees the spells of deafness occur oftener and last longer until at length the hearing remains permanently impaired. In others the deafness commences insidiously and increases slowly but gradually until all useful hearing is lost. Occasionally the aural Catarrh becomes aggravated through cold or other causes, when an acute inflammation in the ear may be set up, resulting in ear-ache pain and subsequent discharge from the ear. Noises in the head of every conceivable description are also apt to make their appearance, adding materially to the existing distress.

NERVOUS DERANGEMENTS.

Catarrh being located so close to the nerve center, the brain, almost invariably exercises a pernicious influence in that direction, and this we find daily verified in our practice. Evidence to that effect manifests itself in the impairment or loss of smell and taste, which so often takes place, as well as in defective power of attention, weakness of memory, and a general enfeeblement of the mental faculties. The patient cannot accomplish his usual mental tasks without a pronounced and painful effort, and finds a persistent attempt to concentrate his attention or to follow a fixed line of thought productive of headache, dizziness, confusion of ideas and excessive fatigue. At times he finds himself completely disqualified for any occupation requiring the active exercise of his intellectual powers.

CATARRH OF THE THROAT.

The throat is invariably more or less involved in Catarrh, producing a feeling of fullness and uneasiness which excites an almost constant disposition to swallow or to scrape the throat, accompanied, at times, by a sensation of rawness, irritation or discomfort behind and above the soft palate, or in the throat itself. Occasionally an almost constant sensation of disagreeable dryness is experienced, giving rise to considerable distress. Cough of variable severity is often present, sometimes of a mere hacking character, but occasionally of a very severe and troublesome nature, accompanied by wandering pains and other uncomfortable sensations through the chest.

The voice is always more or less affected, becoming hoarse, weak, uneven, muffled or cracked, and occasionally it is so impaired that it degenerates into a mere hoarse whisper.

DEVELOPMENT OF CONSUMPTION.

The alarming tendency manifested by Catarrh to the development of consumption is a fact more and more recognized by the profession, as it has long since been noticed by myself and other physicians devoting themselves to this specialty. Indeed, all authorities now agree that next to hereditary predisposition Catarrh is one of the chief and most frequent causes of that fatal complaint; and it can scarcely be otherwise when the nature of Catarrh is taken into consideration. Its tendency is to keep the delicate structure of the mucous membrane lining the respiratory organs in a constant state of inflammation, irritation and discomfort, and to exercise a depressing, debilitating and enervating effect upon the system. Under these circumstances the strongest constitution will in time break down and the system will be unable to endure or resist atmospheric changes and other unfavorable influences, and thus one after another the vital powers give way. The patient loses flesh and strength, feels constantly tired and exhausted and inclined to drowsiness and sleep. The stomach becoming affected, owing to the large amount of offensive secretion which is constantly conveyed to it with the food and drink, digestion is impaired and the appetite fails. The mucous membrane becomes morbidly sensitive, and, in spite of the utmost care, becomes affected from the slightest causes, so that at last even a breath of wind upon the lining of the nose or throat becomes productive of a cold, and gives rise to a serious disturbance of the respiratory organs. Thus the patient is subject to frequent and repeated colds, each one aggravating the disease by giving it a new impulse, and attacking a larger extent of surface than its predecessor. In this manner the inflammation spreads from organ to organ, invading the throat, larynx and bronchial tubes, until, encroaching further and further, it finally reaches the lungs. Let the lesson be borne in mind which experience teaches us daily, THAT TO NEGLECT THE PROPER TREATMENT OF CATARRH IS TO RISK DEATH FROM CONSUMPTION.

TREATMENT AND CURE.

Having shown the widespread and pernicious influence exerted by Catarrh over the entire animal economy, and the diversity of forms in which it may manifest itself, it will be apparent to all intelligent observers that its treatment and cure is a matter of the highest consideration, requiring thorough familiarity with the disease in all its forms, coupled with judgment and skill that can only be acquired by years of study and a large practical experience. In this connection I may here be pardoned in saying that among educated physicians I was the first in this or any other country to devote my attention to the study and investigation of catarrhal diseases, and the happy results which attended my labors have been attested by a multitude of patients.

The method of treatment pursued is as scientific as it is rational and successful. By the aid of an appropriate apparatus of my own construction the affected cavities are thoroughly illuminated, and their condition so clearly brought to view, that the exact seat and nature of the disease can be distinctly seen and plainly recognized. In this manner, and by means of a variety of ingenious appliances, the medicaments, in the shape of liquids, sprays, gases, vapors or powders, as may be required, are conveyed directly to every portion of the affected surface with the most gratifying results, and without causing the least pain or distress. So effective is this plan of treatment that a single application is often productive of decided relief. The offensive discharge diminishes, inflammation subsides, ulcerations are made to heal, morbid growths are removed, irritation is allayed, the mucous membrane is once more restored to a healthy condition, and a permanent cure is finally effected.

DR. LIGHTHILL can be consulted on Catarrh, Deafness, Impaired Sight, and all Di