



POPULAR SCIENTIFIC RECREATION.

A Pretty Illustration of the Pressure of Gas and the Force of Gravitation.

Take a wide mouthed bottle and bore through the cork a hole of such size as to allow the insertion of the neck of a glass funnel, and make an airtight joint with paraffin wax or a bit of common paraffin candle, melted down. There must be no air holes between funnel and cork or be-



THE MAGIC BUTTERFLY.
A green cork and bottle. Half fill the bottle with water and drop into it two of the powders, a blue and a white one (bicarbonate of soda and tartaric acid), sold by chemists for the production of the familiar Seidlitz draught.

The liquid forthwith effervesces by reason of the liberation of the carbonic acid gas, and this gas struggles to escape, as fast as it is generated, through the opening of the funnel. But if you place in the funnel one or two balls of elder pith or cork (in the latter case they may be cut out of a wine bottle cork) the gas can only escape intermittently, one or other of the balls falling, by force of gravitation, into the lower part of the funnel and stopping the passage until the pressure of the carbonic acid gas in the bottle below becomes so strong as to lift it out of the way. Whenever this happens a portion of the gas escapes, the pressure diminishes and one of the balls again falls into the opening. The effect continues as long as the gas continues to be liberated, and if you have painted the balls in different colors their dance as they rise and fall in the funnel has a very pretty effect. By gumming one of your little balls to the center of a cigarette paper, cut out and colored to represent the wings of a butterfly, you may give the experiment quite an artistic character.

A Coal Saving Composition.

In regard to a coal saving composition, lately tested at Leeds, The Iron and Coal Traders' Review says: The composition is a chemical compound resembling fine sand, and one of the principal properties claimed for it is that when sprinkled on an ordinary fire, after it has been made up, it insures thorough combustion, all the gas and tar, which in the ordinary way is allowed to pass off in smoke up the chimney, being consumed. The modus operandi is very simple, all that is required to be done being to sprinkle about half an ounce of the composition over the fire. A chemical reaction takes place in the coal, and the top of the fire becoming cemented together, gradually consumes all of the tar and black smoke given off, while the heat, instead of escaping through the top of the fire, is thrown out into the room. After the fire is about half burnt out nothing but coke remains, and it gives off a great heat. The composition is not, however, suitable for use with a coke fire.

The Gas from Blast Furnaces Utilized.

According to The Iron Trade Review, a company in Scotland pays a yearly rental to a number of iron works for the right to collect the smoke and gases which escape from the blast furnaces. These gases pass through several miles of iron pipes, gradually diminishing from six feet to eighteen inches, and as the gases cool there is found to be a considerable deposit of oil, while the residual gases are used for distilling and other purposes, besides yielding a large percentage of ammonia. At one of these plants in Glasgow, which is the smallest of the works in operation, about 60,000,000 feet of gas is pumped and collected a day and the company recovers on an average 35,000 gallons of oil a week. The oils obtained are for the Laiden and other similar lights and for pickling timber.

Putting Out Fire with Sand.

In connection with the equipment for fire protection of wood working establishments it is recommended by Fire Underwriters that a gallon pail filled with fine sand be always placed within convenient reach of each workman employed where oiling and finishing is being done. This practice might well be followed wherever there is a possibility of fire starting in oils or oil soaked materials. There is nothing which will quell an oil fed fire in its incipency more quickly and effectually than sand—and there are no afterpains in the way of water damage.

Costly Metals.

Some rare metals, possessing special qualities, are required for certain work. Thus palladium is used in making some parts of timepieces, and iridium for the points of gold pens. Lithium is the lightest of metals. Rhodium is extremely hard and brittle, and is only fusible at a very high temperature, and iridium is the heaviest substance hitherto discovered. The unutilized have no idea of the value of these scarce products, which are most of them far more precious than gold and silver, as far as their market value is concerned.

A Gigantic Pendulum.

The experiments with a pendulum, to visibly demonstrate the motion of the earth, formerly made by Foucault under the cupola of the Pantheon, are about to be renewed on an even larger scale, says Popular Science News. The new gigantic pendulum has just been suspended from the center of the second platform of the Eiffel tower. It consists of a bronze wire 260 feet long, with a steel globe weighing 180 pounds at the end.

The Safety Valve advises to always have your boiler covered with non-conducting material, no matter how cheap your fuel may be.

Fuller's earth made into a paste and applied with a flannel will take oil stains off lamp globes.

How They Cure Rheumatism in Pennsylvania.

Mr. J. F. Meighan, a Pittsburgh cigar dealer, awoke one morning with an attack of rheumatism in his right arm. Working around the store during the forenoon made it worse. By noon the pain was so severe that he could not raise his hand to his head and had to

carry his arm in a sling. One of his customers, on learning the facts, went across the street to E. E. Heck's drug store, and at his own expense procured a bottle of Chamberlain's Pain Balm and persuaded the cigar dealer to try it. It eased the pain and reduced the swelling so that by the next morning he could use his arm, and by the second morning was entirely well. This is only one of the many severe cases of rheumatism that have been cured by this valuable remedy. 50 cent bottles for sale by C. F. Heinemann, druggist, 222 N. Main street.

Will cure the worst case of piles known.

OPTICIANS AND JEWELERS.

THIS IS NOT OUR WAY.



THE CAREFUL AND PROPER ADJUSTMENT OF FRAMES IS AS IMPORTANT AS THE CORRECT FIT OF LENSES. We make the scientific adjustment of Glasses and Frames our specialty, and guarantee a perfect fitting of the eyes free. Full stock of artificial eyes on hand. Glasses ground to order on premises.

S. G. KSHUTZ, Scientific Optician, 229 S. Spring Street, Theater Building.



Correct fitting of Glasses and Lenses ground to order our specialties. Optician's prescriptions carefully filled. Artificial Eyes on hand.

DR. WONG HIM.

THE FIRST CHINESE PHYSICIAN TO practice his profession in this city was Dr. WONG HIM. Has practiced here for sixteen years, and has cured many cases of complicated diseases is proof of his ability. He belongs to the sixth generation of a family of physicians, and his knowledge is to be liberally, and if you have painted the balls in different colors their dance as they rise and fall in the funnel has a very pretty effect. By gumming one of your little balls to the center of a cigarette paper, cut out and colored to represent the wings of a butterfly, you may give the experiment quite an artistic character.

TO THE PUBLIC: DR. WONG HIM, 639 Upper Main St., has cured my mother of the typhoid fever in the short time of one week, and has left her entirely well, and also has cured me of a tumor I had on my left side. After suffering for a long time and receiving no benefit from others, I concluded to try the above gentleman (Dr. Wong Him), who has left me entirely well, and now I feel it my duty to testify in his behalf. I wish to recommend him to the public as an efficient and skillful physician. MISS CARIE PEREIRA and MRS. D. C. PEREIRA, 550 Garfield St., Los Angeles, Cal. February 21, 1891.

I take this opportunity of highly recommending Dr. Wong Him's abilities as a physician to all who have any diseases, especially those whose complaints resist the treatment of other physicians. For two months I suffered from impure blood and disordered stomach, together with a sore lip which failed to heal, and finally I was persuaded to call and see Dr. Wong Him at his office, 639 Upper Main street. I had a consultation with him, and after an examination of my blood, he gave me a powder for my lips and medicine internally, and said he would cure me in one week or ten days, and at the expiration of the time declined to give me any more medicine, because I was cured, which statement I fully believe, for I have not been so well for a long time. JOSEPH R. DUBBS, Los Angeles, Cal. February 25, 1891.

I have been sick five months, paid out large sums of money for doctors and medicines, but derived no benefit. Dr. Wong Him was recommended to me by a friend. I did not think I could get well, as my lungs and stomach were very bad and getting worse all the time. Dr. Wong Him took me in this condition; he examined me, and after a few days he said, "I wish to recommend him to the public as an efficient and skillful physician." THOMAS WHITE, Los Angeles, May 13, 1891.

NOTICE.

LOS ANGELES AND PACIFIC RAILWAY COMPANY.—Location and principal place of business, Los Angeles city, California. There is delinquent upon the following assessed stock, on account of assessment levied February 27, 1891, the several amounts set opposite the names of the respective shareholders, as follows:

SUBSCRIBERS.	CERTIFICATE NO.	NO. OF SHARES.	AMOUNT.
A. Gayford.....	24	100	\$200.00
C. Cole.....	100	100	200.00
S. P. Reed.....	33	50	100.00
T. Bennington.....	34	100	200.00
C. B. Woodhead.....	250	30	60.00
J. M. Wicks.....	245	30	60.00
M. L. Wicks.....	257	50	100.00

And in accordance with law and an order of the Board of Directors, made on the 15th day of March, 1891, so many shares of each parcel of said stock as may be necessary will be sold at the public auction, to be held at the City of Los Angeles, on the 20th day of April, 1891, at 11 a. m., of said day, to pay delinquent assessments thereon, with costs of advertising and expense of sale.

At a meeting of the Board of Directors, held on the 20th day of April, 1891, it was resolved that the above advertised sale of stock be postponed to Wednesday, May 20, 1891.

At a meeting of the directors held May 16th, it was resolved that the sale of delinquent stock above advertised be further postponed to Friday, June 5th, at 11 a. m.

5-20td F. E. FRANTZ, Secretary.

NOTICE OF SALE OF WINES AND COOPERAGE.

NOTICE IS HEREBY GIVEN THAT PURSUANT to a certain chattel mortgage, made on 14th day of November, 1890, by John P. Moran and Bank of Los Angeles, California, and recorded in Vol. 10 of chattel mortgages, page 281, Los Angeles county records, the California Bank of Los Angeles, on the 1st day of June, 1891, at 10 o'clock a. m., at the warehouses known as warehouse No. 1 and warehouse No. 2, located in the City of Los Angeles, California, on lots one and three block "A" of the Moran tract in Los Angeles city, near the corner of Ninth street and Maple avenue, caused to be sold at public auction, to the highest bidder, for cash, the following described personal property, to-wit: Fifty-five (55) pipes of wine and fifty-six (56) puncheons of wine and two (2) barrels of wine, and the pipes, puncheons and barrels in which the same is contained and stored, all now stored and located in warehouse No. 3, fronting on Maple avenue, as above described. Also 23 empty pipes, 3 empty puncheons and 15 empty barrels, together with all wines and liquors in the cooperage in which the same is contained, and all casks, pipes and cooperage as described in said mortgage, which said property is now stored in warehouse No. 2, on lots 1 and 3 of the Moran tract as above described.

The presence and bidding of wine dealers are solicited at the above sale. This 25th day of May, 1891.

CALIFORNIA BANK.

By HUGHES & GARRISON, its attorneys, 5-26td

TENTS.

AWNINGS, FLAGS, TRUCK, HAY AND WAGON COVERS.

A. W. SWANFELDT,

115 E. Second Street.

Take Notice—I have removed from No. 202 East second.

4-7-91

MEDICAL.

How Lost! How Regained!

A Great Medical Work for Young and Middle-Aged Men. New Edition.



KNOW THYSELF.

OR SELF-PRESERVATION. A new and only Gold Medal PRIZE ESSAY ON NERVOUS and PHYSICAL DEBILITY, ERRORS OF YOUTH, EXHAUSTED VITALITY, PREMATURE DEGENERATION, and all DISEASES and WEAKNESSES OF MAN. 800 pages, cloth gilt; 155 invaluable prescriptions. Only \$1.00 by mail, double sealed. Descriptive Prospectus with endorsements FREE! SEND FOR IT NOW. Consultation in person or by mail. Expert treatment. INVOLUBLE SECRECY and CERTAIN CURE. Address: THE PEABODY MEDICAL INSTITUTE, No. 4 Bulfinch St., Boston, Mass. Or Post Office Box 1895, THE PEABODY MEDICAL INSTITUTE has many imitators but no equal.—Herald, (Copyrighted).

DOCTOR WHITE'S

Private Dispensary, 133 N. MAIN ST., LOS ANGELES, CAL.

[ESTABLISHED 1886.]

NERVOUS DEBILITY, seminal weakness, impotency, etc., resulting from youthful indiscretion, excesses in matured years and other causes, inducing some of the following symptoms: Loss of energy, loss of ideas, defective memory, aversion to society, blotches, eruptions, excoriations, urticaria, etc., are permanently cured. URINARY, KIDNEY AND BLADDER troubles, weak back, incontinence, gonorrhea, gleet, stricture, and all unnatural discharges are quickly and perfectly cured.

SCROFULA AND SYPHILIS,

causing ulcers, eruptions, enlarged joints, rheumatism, swelling in groins, mucous patches in mouth, sore throat, falling hair, catarrh, and many other symptoms, are quickly and permanently cured from the system, by purely vegetable treatment.

TREATMENT at office or by express. All letters strictly confidential. old office, 133 N. Main St. 5-29 tf

TO THE UNFORTUNATE!

Dr. Gibbon's DISPENSARY

623 Kearny Street

Corner of Commercial, San Francisco, Cal. Established in 1854, for treatment of Sexual and Seminal Diseases, such as Gonorrhea, Syphilis, Stricture, etc., in the most successful manner. The doctor has traveled extensively in Europe and inspected thoroughly the various hospitals there, obtaining a great deal of valuable information, which he is now competent to impart to those in need of his services. The doctor cures where others fail. Try him. DR. GIBBON will make his home in California. Address: DR. J. F. GIBBON, 623 Kearny Street, San Francisco, Cal. 5-12 tf

DR. JORDAN & CO'S

MUSEUM OF ANATOMY

Removed to their New Building, 1601

Enlarged, where 10,000 instructive objects may be seen, collected in Europe at a cost of \$20,000. The collection includes the skeleton of the Mississippi. Established here twenty-five years ago. Go and be taught how to preserve your health and vitality, and avoid sickness and disease. H. W. HILLMAN, its former manager, 25c. Private Office, No. 211 Kearny St. 5-12 tf

\$500 Reward!

WE will pay the above reward for any case of Liver Complaint, Dyspepsia, Sick Headache, Constipation or Colic, or any other ailment of the digestive system, which we cannot cure with West's Vegetable Liver Pills, when the directions are strictly complied with. They are purely "vegetable" and will give satisfaction. Sugar Coated. Large boxes, containing 30 Pills, 25c. Boxes of counterfeits and imitations are numerous. Beware! THE JOHN C. WEST COMPANY, CHICAGO, ILL. Sold by H. M. SALT & SON 226 S. Spring St.

SUMMONS.

IN THE SUPERIOR COURT OF THE STATE OF California, in and for the County of Los Angeles.

Attorney E. Mullen, plaintiff, vs. Thomas C. Mullen, defendant.

Action brought in the Superior Court of the State of California, in and for the County of Los Angeles, and the complaint filed in said Court of Los Angeles, in the office of the Clerk of said Superior Court.

The People of the State of California send greeting to Thomas C. Mullen, defendant.

You are hereby required to appear in an action brought in the Superior Court of the State of California, in and for the County of Los Angeles, and the complaint filed in said Court of Los Angeles, in the office of the Clerk of said Superior Court.

The People of the State of California send greeting to Thomas C. Mullen, defendant.

You are hereby required to appear in an action brought in the Superior Court of the State of California, in and for the County of Los Angeles, and the complaint filed in said Court of Los Angeles, in the office of the Clerk of said Superior Court.

The said action is brought to obtain a decree of said court dissolving the bonds of matrimony existing between said plaintiff and defendant, as alleged in said complaint, upon the grounds of willful desertion of said plaintiff by said defendant, and also that the custody of two minor children mentioned in said complaint be awarded to said plaintiff, and for such other and further relief as may seem just and proper, and for costs of suit. Reference is had to complaint for particulars.

And you are hereby notified that if you fail to appear and answer the said complaint as above required, the said plaintiff will cause your default to be entered, and will apply to the court for the relief demanded in said complaint, upon the grounds under my hand and the seal of the Superior Court of the State of California, in and for the County of Los Angeles, this 4th day of May, in the year of our Lord one thousand eight hundred and ninety-one.

T. H. WARD, Clerk.

By D. E. ADAMS, Deputy Clerk.

Jones & Carlton, attorneys for plaintiff.

5-11 mon 2m

Notice for Publication of Title for

Proving Will, Etc.

IN THE SUPERIOR COURT, STATE OF CALIFORNIA, County of Los Angeles.

In the matter of the estate of Jean Begue, deceased.

Notice is hereby given, that Tuesday, the 9th day of June, 1891, at 10 o'clock a. m. of said day, at the courtroom of this Court, Department Two thereof, in the City of Los Angeles, County of Los Angeles, and State of California, has been appointed as the time and place for hearing the application of Alanis de Begue, praying that a document now on file in this Court, purporting to be the last will and testament of the said deceased, be admitted to probate, that letters testamentary be issued thereon to Alanis de Begue, at which time and place all persons interested therein may appear and contest the same.

Dated May 26, 1891.

T. H. WARD, County Clerk.

By F. E. LOWRY, Deputy.

AT THE MAMMOTH

315 and 317 South Spring St.

GREAT REDUCTION SALE

OF

Boots, Shoes and Slippers

FOR 10 DAYS

COMMENCING MONDAY, JUNE 1st.

GENUINE BARGAINS attract the attention of everyone, and we intend to make this a memorable Ten Days' Sale in the way of Bargains.

A BONANZA FOR THE PEOPLE.—As we are soon to receive large shipments of goods direct from some of the Best Eastern Manufacturers, and wish to close out lines now on hand that are somewhat broken in stock before the arrival of new goods, we will make a Big Reduction in the way of prices for the next Ten Days.

HALF PRICE.—In many cases we will actually sell goods at Half price in order to close them out at once.

NOTE SOME OF THE BARGAINS.—Lot of Ladies' French Kid and Dongola Button of E. C. Burt's make, will be sold at \$3.50; former price \$6 and \$7.

Burt & Packard's make of Men's Fine Hand-sewed Shoes at \$4; former price \$8. How is this cut for fine shoes?

HERE IS ANOTHER LIST OF BARGAINS.

Infant's shoes reduced from 50c to 25c
Ladies' fine shoes reduced from \$3 to \$2.00
Infants' shoes reduced from 75c to 50c
Lot of ladies' fancy slippers at Half Price.
Children's shoes reduced from \$1.25 to 90c
Men's shoes, reduced from \$3.50 to \$2.00
Misses' shoes reduced from \$2 to \$1.25
Ladies' button shoes reduced from \$2 to \$1.25
Ladies' fine shoes reduced from \$3 to \$2.00
Lot of ladies' fancy slippers at Half Price.
Men's shoes, reduced from \$3.50 to \$2.00
Men's shoes, reduced from \$2 to \$1.00

We mention only a few of the Bargains to be had at this Great Sale, but we have many others to show you.

CALL AT ONCE FOR BARGAINS

MAMMOTH SHOE HOUSE,

315 and 317 S. Spring Street,

Near Third Street.

OLCOVICH BROS., - PROPRIETORS.

5-31 tf

BANKING HOUSES

Security Savings Bank, Capital, \$200,000

NO. 148 SOUTH MAIN STREET, LOS ANGELES, CALIFORNIA.

OFFICERS AND DIRECTORS.

F. N. MYERS, President Nevada Bank, San Francisco; President Farmers and Merchants Bank, Los Angeles.

ANDREW J. BOWNE, President Fourth National Bank, Grand Rapids, Mich.; President Hastings National Bank, Hastings, Mich.

MRS. EMELINE CHILDS, Executrix Estate of O. W. Childs, deceased, Los Angeles, Cal.

C. A. FLEMING, Vice-president Farmers and Merchants Bank, Los Angeles.

T. L. DUQUE, Capitalist and Wholesale Merchant of Panama, Republic of Colombia.

H. W. HILLMAN, Of Hellman, Waldeck & Co., Wholesale Stationers, Los Angeles.

JAMES RAMSON, Of Gray, O'Connell & Shattuck, Attorneys, Los Angeles.

J. F. SARTORI, Cashier, also Vice-president First National Bank, Monrovia, Cal.

FIVE PER CENT INTEREST PAID ON DEPOSITS.

The notice of the public is called to the fact that this bank has a large paid-up capital, and only loans money on approved real-estate security; that among its stockholders are some of the oldest and most responsible citizens of the community; that, under the state law, the private estates of its stockholders are pro rata liable for the total indebtedness of the bank. These facts, with care exercised in making loans, insure a safe depository for saving accounts. School teachers, clerks, mechanics, employees in factories and shops, laborers, etc., will find it convenient to make deposits in small amounts. CHILDREN'S SAVING DEPOSITS received in sums of 25 cents and upward. Remittances may be sent by draft or Wells, Fargo & Co.'s express. 5-14 6mos

5 PER CENT INTEREST ON DEPOSITS.

Main Street Savings Bank and Trust Co.

NO. 426 SOUTH MAIN STREET, LOS ANGELES, CAL.

INCORPORATED OCT. 28TH, 1889.

J. B. LANKESTER, Pres't. F. W. DE VRIES, Cashier. CHAS. FORMAN, Vice-Prest.

5-cent Deposit Stamps for Sale at Stores in different parts of the city.

Deposits will be received in sums of from one dollar to five thousand dollars. Term deposits in sums of fifty dollars and over.

We declare a dividend early in January and July of each year. Its amount depends on our earnings. Five per cent. on term and from three to four on ordinary.

Money to loan on mortgages. Bonds and dividend paying stocks bought and sold.

INCORPORATED OCT. 28, 1889.

INCREASE OF TOTAL RESOURCES.

January 1st, 1890. \$115,871.37

April 1st, 1890. 191,715.92

July 1st, 1890. 287,711.36

October 1st, 1890. 324,804.46

January 1st, 1891. 389,453.86

May 30th, 1891. 518,492.81

STATEMENT OF THE CONDITION

OF THE

LOS ANGELES NATIONAL BANK

OF LOS ANGELES, CAL., MAY 4, 1891.

RESOURCES: LIABILITIES:

Loans and discounts. \$ 829,287.91 Capital. \$ 500,000.00

Banking house and fixtures. 178,994.64 Surplus. 50,000.00

Government bonds \$430,000.00 Undivided profits. 24,867.58

Due from banks. 479,438.91 National bank notes outstanding. 45,000.00

Cash on hand. 270,023.57 1,179,462.48 Deposits. 1,525,837.45

Total. \$2,175,705.03 Total. \$2,175,705.03

5-16 2w

TROY LAUNDRY,

Works, 571, 573 and 575 North Main Street. Telephone No. 46

MAIN OFFICE, UNDER LOS ANGELES NATIONAL BANK, FIRST AND SPRING STREETS.

Dress Shirts and Lawn Tennis Suits and Tennis Shirts Neatly Done.

GIVE US A TRIAL ORDER.