

*Dr. J. Clark at San Francisco  
Room No 50 - 9th St 10 AM*

# Prospectus

OF THE

## Leaming Petroleum Company,



SAN FERNANDO DISTRICT,

Los Angeles County, Cal.

*Incorporated, February 10, 1872.*

Capital Stock, - - - - - \$1,000,000.

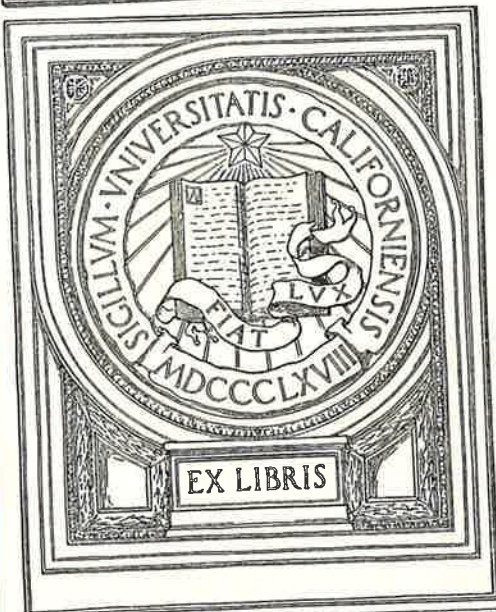
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UNIVERSITY OF CALIFORNIA  
AT LOS ANGELES



ROBERT ERNEST COWAN

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1872

## PROSPECTUS

OF THE

### LEAMING PETROLEUM COMPANY,

SAN FERNANDO DISTRICT,

LOS ANGELES COUNTY, CAL.

This Company has recently been incorporated in San Francisco, for the purpose of developing and extracting Petroleum in San Fernando District, Los Angeles County, California, with a Capital of one million dollars, divided into ten thousand shares, of one hundred dollars each. Five thousand shares of this Capital Stock are set aside as a working Capital.

The By-Laws of the Company provide "that no assessments shall be made upon the Capital Stock of the Company, until the entire amount of twenty-five thousand dollars raised, received, or realized from the sale of the Stock of the Company, set apart as a working Capital, and from the production of the Oil Springs, Wells and Tunnels worked by the Company, shall have been expended by the Trustees in the workings of the Company.

The Company owns one hundred and sixty acres of Petroleum deposits, located in San Fernando District, Los Angeles County, California, with a full title to the land, properties, timber and water-rights. The oil is developed in various parts of the section, and is of a most excellent quality. A quantity has been shipped to San Francisco, and proves to be superior to that of Pennsylvania. The oil wells of the District are now being actively worked.

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Some of them to the depth of one hundred feet show an increasing quantity of fine quality of oil. The shipments already made are of a profitable character, and the demand, as yet, cannot be fully supplied. The cost of transportation from the District to the port of San Pedro, at present is  $2\frac{1}{2}$  cents per gallon, and this expense will be lessened every month as the quantity of Petroleum is increased, and the projected Southern Railway, which passes in front of the Company's property, is in running order. Capitalists in Los Angeles and elsewhere propose to establish Refining Works for Petroleum, and the Gas Companies of San Francisco will purchase all they can get.

The Company have complied with all the requirements of law in securing their property, their possession being actual and undisputed, and their title in every respect secure as a United States Patent already obtained can make it.

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## OPINIONS OF THE PRESS.

The following descriptions, taken from the *Alta California*, of San Francisco, the *Oakland Transcript*, and *Scientific Press*, will convey a knowledge of the Oil Springs and Wells, and the geological formation of the San Fernando District.

### Petroleum at San Fernando.

It is said that the extraction of petroleum is soon to be commenced, on an extensive scale, at San Fernando, thirty-five miles northwest from the city of Los Angeles, on the road to Fort Tejon, and thirteen miles from the Mission of San Fernando, tunnels having been cut from seventy to one hundred feet deep, and all produce good petroleum. The boring is according to the principle of artesian wells, and the same as practiced in Pennsylvania. The petroleum is led through iron pipes to large tanks, and is dipped with

buckets from the springs. The cost of transportation to Los Angeles is about two cents per gallon. The cost of refining is about two cents per gallon, upon a small scale, and  $1\frac{1}{2}$  cents upon a large scale. The quantity of refined petroleum from 100 gallons of crude is from 60 to 65 gallons. The residuum is valuable for gas purposes, fuel, etc.

The formation lies in a range of mountains extending in a course nearly east and west. The central stratum is shale, which seems to contain the most oil and inclines north and south at an acute angle, the top being from one hundred and fifty to two hundred feet wide, slightly depressed and covered by a stratum of sandstone of variable thickness. This stratum is bounded by a similar sandstone, alternating with thin seams of limestone and hard conglomerate. At the base of the mountain the formation is hard sand and limestone, containing marine fossils of a recent era. The mountains reach a height of about 700 feet above the level of the local rivers, and about 4,000 or 5,000 feet above the sea level. The oil stratum varies in width, being in some places a mile or more, as in Rice Cañon, in others only a few hundred feet, but it continues for many miles. In the gulches and cañons, where the water has eroded the formation and exposed the shale to the action of the atmosphere, the oil is found oozing out. The mountains which are crested with shale, show oil, it being carried through the shale by capillary attraction. In some places the tunnels are run into the mountains. The oil drips through the slate when it is cut through.—*Alta California*, February 4th, 1872.

### San Fernando Petroleum, Los Angeles County.

Years ago, prospectors and borers for petroleum struck the smell of "ile" in several localities in this State. But all efforts to discover a *bona fide* vein proved vain. We have a very unpleasant recollection of a subterranean trip made in a tunnel four years ago. The "bore" was made in the Mt. Diablo Range, just beyond the northern limits

of this same Alameda County. The enterprising owners "knew" they had a dead thing, and by the time they quitted the hunt, a good many defunct things could be found lying around loose. Before entering the unearthly hall, guide and our party were arrayed in a panoply of petroleum proof oil cloth. At the mouth of the cavern we caught the scent. There could be no mistake. It was the real odor oozing from roof and walls, dripping on head and soaking the canvas shoes; the tunnel seemed saturated with the precious fluid. And yet no fountain or stream was found, and after the expenditure of much coin and labor, the search in a few months was abandoned.

But now we have news of a discovery at San Fernando, Los Angeles County, which, it is positively asserted, is no *ignus fatuus*. It is stated, however, that the proprietors of the land, have not only known of the existence of petroleum there, but have also made experiments which resulted favorably. It was supposed that asphaltum was all that could be produced from deposits of that character, it being the opinion of the early army service men of 1846 and 1847, that coal was the substratum of the asphaltum lakes. Since then, California petroleum, of a denser weight than that of Pennsylvania, has been brought to light, and the notice of the world at large, as a more valuable article, producing more illuminating matter from the same quantity of oil, than in Keystone State. We have already assisted so materially our Eastern brethren in the production of gold, silver, wines, wool, grain, fruits and other commodities, that now it is proposed to give them light and an invaluable lubricating material at cheap prices.

William C. Humphreys, of the Chemical College, London, in his report made in 1846, stated the coal oil of California contains a large part of illuminating and eighty per cent. of lubricating oil. If the material sent, adds the report, where in its natural state (which it was) it is the most extraordinary production known, and unlike anything found elsewhere in the United States or in Europe. Mr. J. Ross Browne, in his report upon minerals and resources of Cali-

fornia, thus tells us about these same deposits of San Fernando, where he made a full and satisfactory examination. In his investigation of San Fernando, at an altitude of from 500 to 700 feet above the local rivers, and some 5,000 feet above the sea, he says "the quantity of oil available will probably be sufficient to supply the demand of the Coast. The quality undoubtedly differs in composition from the Eastern oils, in containing a large per centum of carbon. With lamps so arranged as to give an increased supply of oxygen, by creating a large current of air through the chimneys, it produces as bright and white a light as the oils from Pennsylvania, Virginia or Canada. The excess of carbon increases the value of petroleum for fuel, a use for which it is now attracting attention. In a country where fuel is scarce, an abundant supply of petroleum of this character, becomes a very important resource."

M. Benoist, a French chemist, has made an analysis of one hundred pounds of crude petroleum, which gives: Material density of 72° Beaume of naphtha, 7½; do 65° benzine, 7½; do 44° illuminating oil, 37½; do lubricating oil, 37½; asphaltum (residuary), 10.—100.

The climate is mild, of a uniform temperature, and work can be carried on at the wells at all seasons of the year.

An incorporation is just now being formed for the development of the petroleum of San Fernando, and wishing well to every pioneer enterprise we have, it is fitting and proper to state the above facts.—*Oakland Transcript*, Feb. 7th, 1872.

### California Petroleum---Discoveries in San Fernando, Los Angeles County.

A telegram on the 3d inst. informs us that an experimental shipment of 100 barrels of crude petroleum was being shipped from San Fernando District, Los Angeles, for the petroleum refinery of this city. We had already been informed that recent developments at that locality had been such that much attention was being attracted to those de-

posits, and on further inquiry we have learned that a company is being formed in this city to thoroughly develop the deposit, and secure a home production for this important and indispensable commodity. From the facts which have been elicited, we feel warranted in saying that one of the most important enterprises is about to be set on foot which has yet been attempted in the State. The gentlemen engaged in this enterprise are so sanguine of success that they are preparing the material and machinery to commence operations in a short time, and orders have already been received from a single house, for 1,000 barrels of oil per day, under a contract for an unlimited time—an order which the company feel fully assured they will be able to answer as soon as the proper arrangements can be made to commence operations in earnest.

[Since the above was written, the shipment of the 100 barrels above referred to has arrived; also another shipment of 153 barrels by the steamer Kalorama, on the 15th instant. There are also about 150 barrels at the Springs now awaiting transportation.]

### The Locality of these Deposits

Is at a point about 35 miles distant from the Los Angeles Railway Depot, over an excellent road; and from thence by rail to the shipping point at San Pedro. The distance is 21 miles by rail—total distance to seaboard 56 miles. The wagon road to the railroad is better in winter than in summer—thus insuring good transportation at all seasons of the year. According to latest accounts from the locality, the deposits are very extensive, and from the work done upon them up to this time abundant proof has been adduced that natural petroleum of the highest grade is about to be added as an important and valuable addition to the commercial wealth of California. In addition to numerous natural springs, from whence the petroleum can be readily

gathered in quantity, several wells have been sunk with the most satisfactory result. The shipment above alluded to has been dipped with buckets from natural springs, and yields from 60 to 65 per cent. illuminating oil, while the residuum is valuable for gas purposes, fuel, etc.

The formation where these deposits are found, lies in a range of mountains trending nearly east and west, and varies in width from a few hundred feet to a mile or more. The oil is found oozing out from a strata of shale and sandstone, wherever the gulches and cañons have cut it to any considerable depth. In addition to the wells, several tunnels have also been run, to tap the deposits, from the walls of which the oil oozes, wherever they enter the shale or sandstone strata. The cost of transportation from the springs to the railroad is about two cents per gallon.

Dr. Vincent Geleich, of Los Angeles, from whom we have gathered the above facts, is now at the Russ House, in this city. He has several gallons of oil with him, samples of which he will be pleased to furnish to such as feel an interest in the matter, and give any information to those who are desirous of becoming acquainted with this new development of the natural wealth of California.

### Commercial Value of Petroleum.

It may be interesting in this connection, to look for a moment at what this product of nature is still doing for Pennsylvania, after many years of uninterrupted yield. By examining the commercial statistics of Pennsylvania it will be seen that the export of petroleum from that State for the year 1870, amounted to the sum of \$34,000,000—more than the gold yield of California. This product has added greatly to the prosperity of Pennsylvania, and is a source of immense wealth. The demand for petroleum all over the world is very great. The traveler finds it in England, Germany, Russia, France, Italy and Turkey—all imported from Pennsylvania.

In the report of the exports of Philadelphia for eleven months of last year, petroleum is the leading item of that

effectually prevented the spread of the infection. He believes that to this method is to be attributed the success that attended his practice during the eleven months continuance of that terrible epidemic.

The Doctor has used carbolic acid, creosote, chlorine and bromide of potassium, etc., in different forms, as recommended by many physicians, but the best results obtained in cases of small-pox were from petroleum, which is more convenient, more agreeable to the senses, and a much cheaper article. He recommends its uses in all systematic cases where patients are afflicted with typhoid fever, scarletina or variola.

### Antiseptic Properties of Petroleum.

The antiseptic properties of petroleum are well described by Dr. J. W. Twoler, Professor of Chemistry, etc., in Hobart College and Geneva Medical College, in his analysis of it made some time since. He first describes what putrefaction is, and states, "that it is the decomposition, decay or natural destruction of dead or organic matter. That which promotes putrefaction is air, moisture, warmth, cryptogamic plants and infusory insects. Dead organic substance, deprived of air and moisture and kept in a vacuum, resists putrefaction for an indefinite time. Chemicals may act in various ways in checking and preventing putrefaction; they may in the first place exclude air and moisture mechanically, as it were like oils, resins, paints, tars, gums, etc.

Now certain chemicals act in a two-fold manner—they may either abstract water from the organic matter and form new compounds, or they may extract the moisture by the oxygen of the air. Such antiseptics are alcohol, common salt, saltpetre, etc. Others again, act in a three-fold manner; they abstract the water, exclude the air and destroy animal and vegetable life.

The substance that will best perform all this work is petroleum. If, for instance, a log of green wood be immersed

in petroleum, the water and air in the pores of the wood are displaced by the petroleum. Petroleum thus excludes air and moisture from organic substances. It also destroys living vegetables and animals. Petroleum contains no oxygen—which is a necessary element of decomposition. Out of all substances this hydrocarbon appears to be the most powerful antiseptic known; and I have no hesitation in recommending it for the purpose set forth.

The ancient Romans were acquainted with the preservative qualities of carbon. This fact is deduced from numerous charred stakes found in their military embankments and dams; but their system of employing it was merely superficial; whereas petroleum and liquid carbon, which covers and protects the minutest pores of the wood, expels the water and air, and thus substitutes the indestructible carbon for materials that promote decomposition.

### As an Antidote for the Bites of Poisonous Insects, Reptiles, Etc.

Petroleum is, also, a specific for the cure of the bite of venomous insects, such as bees, spiders, etc., and the bite of reptiles. A farmer in Illinois had a large bee-gum near his house; one day some children playing near it annoyed the bees, which suddenly attacked the intruders and stung some of them in a terrible manner; the mother of the children immediately washed with petroleum the parts stung, and instant relief was obtained. The same writer asserts that petroleum is an antidote for the bite of rattlesnake and reptiles of all kindred nature.—*Scientific Press, Feb. 10th 1872.*

### Safety and Nature of Gasoline.

In utilizing the light petroleum fluid called Gasoline, there is no more danger or difficulty than in using a tallow candle. In fact, as used in our machines, there is

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less danger than arises from the use of common coal gas.

Petroleum is essentially a compound of carbon and hydrogen, and is well known, as it comes from the earth in a crude state, to be composed of various oils and materials of different gravities, which, by careful distillation, are separated into a great number of commercial fluids, each having its peculiar name and uses. Those portions which range in gravity from seventy-five to ninety degrees, Beaume, are called Gasoline and when used for the generation of "air gas," are colorless and extremely volatile, leaving no residuum after evaporation, and are of a standard gravity of eighty-five degrees, Beaume, at the temperature of sixty degrees Fahrenheit.

The classification usually adopted by distillers of Petroleum is as follows:

	Specific Gravity.	Beaume Hydrometer.	
All below	.664	above 88°	is called Chymogene.
" From	.664 to .705	88° to 70°	" Gasoline.
" "	.705	" 745 70°	" 60° " Naphtha.
" "	.745	" 785 60°	" 50° " Benzine.
" "	.785	" 854 50°	" 35° " Kerosene.
" "	.854	" 953 35°	" 28° " Lubricating Oil.

SAN FRANCISCO, February 10th, 1872.

The Leaming Petroleum Company filed its Certificate of Incorporation in County Clerk's office to-day; object, to mine for Petroleum, Naphtha, Asphaltum, and the oils thereof, and all other kinds of mineral and subterranean oils and substances in San Fernando District, Los Angeles County. Capital Stock, \$1,000,000, divided into 10,000 shares of \$100 each.

Trustees—George W. Beaver, Joseph W. Stow, John Shirley, A. Giorgiani and A. W. Von Schmidt.

Principal place of business, San Francisco.

RICHARD WEGENER, Secretary,  
414 California Street, San Francisco.