DITCHES AND DAMS.

The Irrigation System of Placer.

MONEY-MAKING CONVERSIONS

New Uses for the Old Storage Waters of the Hydraulic-Mining Days.

In the first article in the present series on Irrigation in California it was stated that the northwestern flank of the Sierra Nevada is assuming importance as a great irrigating district, adding that, perhaps, one of the most interesting aspects of the whole question was the steady conversion of mining ditches into irrigating canals. One of the most remarkable examples of the conversion is to be found in Placer county and will be the subject of the present article.

Before detailing this work of irrigation it will be well to devote a few paragraphs to a consideration of Placer county, the improvements that have been made there and the natural advantages of the district, especially as it has been claimed by the residents of Placer that their county enjoys "the maximum of merit with the minimum of notoriety." Its total superficial area (estimating the unsurveyed mountain lands) is approximately 845,000 acres. It has two hydrographic or water drainage system. The western and lower portion is the basin of the Sacramento river and its tributaries, covering 675,000 acres; while the eastern or Tahoe basin contains 170,000 acres. The county is a parallelogram in shape, and is divided into three cross sections, the plains, the foothills and the mountains. It is about 100 miles long by a varying width of from ten to thirty miles, extending from about eight miles from the Sacramento to the summit of the Sierras.

Through the southwestern part of the county, like a gigantic roadway, extends the thermal, or warm belt, suitable for citrus culture. To the general reader not familiar with the characteristics of this thermal belt, which is rapidly becoming famous in the climatic features of California, it may be well to give some explanatory facts. Flat or bottom lands, where the soil is wet and the low lying air more or less humid, are more deadly in effect upon trees in blossom or early leaf or vegetation than the ordinary white or dry frosts. Besides, it is a well known fact that marshy, or even low lands, in a particular latitude where frosts occur, will have a great deal more than will be found upon the adjoining and more elevated hillsides.

In the evening it may be observed, when passing through an undulating country, that the air grows perceptibly cooler when going from the hill into the valley, and again warmer as one leaves the valley for the hillside. As the sun sinks the air grows cold, and as the cold air is the heavier it gravitates down the hillsides into the valleys, and the warmer air rises. The cold air generates the frost and the warm air prevents it.

This is the open secret of the thermal belt, as it exists in California. It is found at a particular altitude and locality. It is limited in extent, compared with the whole State, although comprising many tens of thousands of acres. It is not a frostless region, and it is absurd to say so, for it is almost impossible to find a frostless region except in a distinctly tropical climate. But the frosts of the true thermal belt are light when they do occur and not especially hurtful to citrus growth.

Many countries have favored districts, as in Spain, the only successful raisin-producing districts being Malaga and Valencia, but in California the raisin-producing districts are extensive and found in sections extending from San Diego to above Oroville, but those districts favorable to raisin producing in California are not essentially the most favorable for citrus culture, for raisins, though successfully grown and cured in the thermal belt, will do well outside of it, the raisin grapevine being hardier than the orange or lemon tree.

The most favored region in all respects, therefore, of light frosts, desirable and well-drained soil and equable temperature, is the best for citrus culture. All these essentials are found in the thermal belt of Placer county, and experience has already proved it by the results achieved in the orange groves at Penryn, Newcastle and Rocklin, where some of the finest oranges produced in the State are grown, and are but samples of what will soon be produced upon an immense basis.

Orange trees in this region are entirely free from the fluted or cottony scale which is devastating so many orange groves in the South, and the Penryn and Newcastle oranges are also entirely free from smut or any discolorings whatever, and, what is more and most important, ripen several weeks in advance of oranges in the South, ripening so early, indeed, as to avoid the cold weather of December and January. The benefit of this fact was felt in the last almost unprecedented cold snap of January, before which the Placer county orange crop was picked and marketed.

If anything was required to absolutely prove the particular adaptability of Placer county to successful citrus culture, it was this cold spell of January last, which was the coldest period known in the country since 1854, or thirty-four years ago. Orange trees of two or three years' standing were entirely uninjured, while the loss in young and tender groves, fresh planted, were so trifling as to be of slight importance.

The stranger naturally supposes from the more or less mountainous regions existing in Placer, El Dorado and Yuba counties, that these counties are all of high elevation and long-continued cold, overlooking the important fact that these counties from their magnitude reach from the level plains to the mountain summits, and possess a most varied climate.

Through these counties, from El Dorado county up, in a northwesterly direction, through Placer, Yuba and Butte counties, the thermal belt extends, having a varied width of from ten to fifteen miles, and a length of eighty miles from the commencement in El Dorado county to Oroville in Butte county. The course of this belt is not through a mountainous region at all, but extends over lands lying at an altitude of from a few hundred feet up to 1500 above the sea level. It comprises strictly the foothill region. Its area within the four counties referred to is some 600 square miles or 500,000 acres. Of this extent it may be estimated that not more than 50,000 acres within it are first-class citrus land, that is, land which exists upon appropriate hillsides and slopes where the exposure, soil, irrigation and drainage are perfect. In addition to this the thermal belt contains 300,000 acres suitable with irrigation to the successful cultivation of the tender varieties of deciduous fruit trees, the almond, walnut, chestnut, prunes, apricot, nectarines, peaches, plums, etc., as well as grapevines in endless variety. Lastly, outside the thermal belt there are hundreds of thousands of acres suitable for the hardier varieties of fruit trees, as well as all grapevines, apples, and many of the fruits which grow on the warm lands.

The winter and spring rainfalls in this belt are regular and uniform, occasioned by its proximity to the mountains. No region more beautiful and healthful exists in the world, or where the winter climate is nearer perfection. In addition to its natural advantages it has the benefits of an extensive railroad system. These railroad facilities are of great value to a fruit region for the immediate transportation of ripe fruit, which, coupled with the magnificent system of irrigating canals and ditches now being completed, will give to Placer county unequaled advantages.

Few residents of the State are aware of the immense strides Placer county has taken during the past few years in fruit-growing. Newcastle is the shipping point from which fruit grown about Penryn, Loomis and its own vicinity is forwarded. The amount shipped from this single station in 1887 exceeded 500 carloads, and during the shipping season the activity in fruit-shipping from this station is something interesting to witness, running up to between twenty and thirty carloads per week.

The superior quality of foothill fruit is already recognized by shippers, for in addition to the superior quality of the fruit, it possesses the keeping quality and holds its bloom longer than the river or lowland fruit. But one very important advantage over all other fruit lands in the State Placer county possesses in the saving of one day in the transportation of fresh fruit East. This gave Placer county last year the palm and recognized advantage over all other fruit-shipping districts in the State. The advantages are enjoyed of picking the fruit in the early morning, and of packing it away while fresh and cool, and of shipping it on the cars at the fruit stations on the same day. The cars, leaving at night on the overland train, speed on into a cooler latitude, and the fruit, never having been heated after leaving the tree, arrives in a very much fresher condition than that which has lost a day or two in being transported to other shipping points for re-handling. This method of direct shipments from the orchards East has created important shipping stations in the county and has induced intelligent and comprehensive men to engage in the business, who have erected expensive and spacious warehouses connected by side tracks with the main line, where, cash in hand, they stand during the shipping season, ready to pay for all good fruit that can be delivered.

While prominence has been given to the orange as pre-eminently the most profitable fruit that can be grown in the favored districts of the thermal belt, one cannot but admit that the results from the peach, pear, plum, cherry and other kindred fruits within and outside the thermal belt of Placer county almost surpass belief. Although single acres of seven and eight-year-old orange trees have last year a yield of between $300 and $400, this has been about equaled by a single cherry tree at Newcastle, which has had $300 worth of cherries taken from it in a single season, while the many instances of orchards which have yielded hundreds of dollars per acre are too numerous to specify.

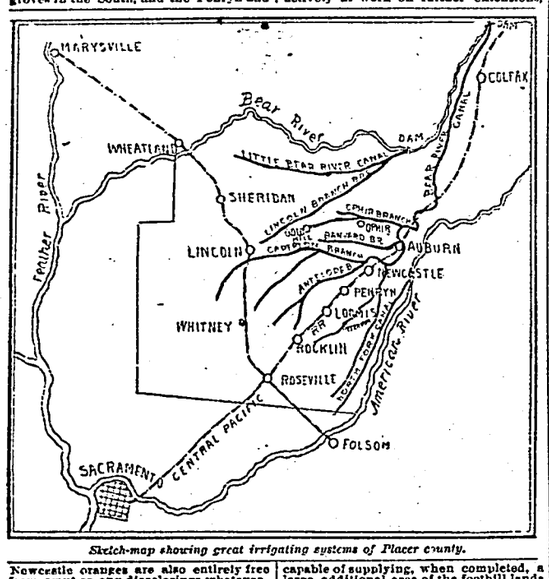
It may be noted also that Placer county is the first to deliver early fruit in the market. Last year the first cherries in the market were sent April 21st, from Newcastle, whence were also shipped the first apricots, May 23d. The first ripe raspberries were sent May 11th. The first blackberries were shipped May 19th, from near Penryn, and the first ripe oranges were shipped last year in answer to express orders from Nevada, Colorado and Utah as early as the middle of November. It is to be noted, too, that upon an impulse, with scarcely a day's consideration or reflection, in the middle of last December, a carload of specially ripe oranges was got together with lemons, olives, Japanese persimmons, raisins, red holly berries and other similar products of the county and sent down to Los Angeles and placed on exhibition there for two weeks. This exhibit was as startling as it was bold, and elicited from many Southern citrus growers the admission that no better fruit could be produced in the South. Since the exhibit, Placer county has been visited by hundreds of land seekers, and many large as well as moderate tracts have been sold. In fact, the Record office work at the county seat, Auburn, now shows nearly four times the amount of labor there witnessed some months ago, and Placer county is at last going ahead.

Irrigation for fruit culture in Placer county on an extensive scale is an industry of comparatively recent date. At about the time that mining ceased to be longer remunerative the Central Pacific railway was constructed through the county. A few of the citizens of Newcastle found a ready market for berries and fruit at Gold Hill and Virginia, Nev., and then as transportation facilities were extended the fruit was sent farther East. The business proving highly remunerative, others were induced to join in the new industry, and from this small beginning the business has grown year by year with increasing rapidity to its present dimensions.

Water for irrigating the fruit belt is supplied mainly by the Bear River Canal system, which, with its branches and projected lines now being constructed, is the largest single system in Central California. The dam, or primary reservoir, from which the water is taken, is on Bear river, about two miles above Colfax. Thence the water is taken by the main canal, running southerly to the foothills below, and distributed by various branches and offshoots wherever required. The system, including the Little Bear river canal, which takes water from Bear river about fifteen miles below the main dam, comprises an aggregate length of nearly 300 miles.

These Bear river canals originated in the early mining period and are the oldest in the State, having been commenced in 1851, and were built, for the purpose of supplying the mining demand, at a cost at that time of $1,100,000, and yielded then an annual revenue to the owners of $100,000. Since then hydraulic mining has been shut off, but with its decline the demand for water for irrigating purposes increased, and the present owner of the Bear river system, F. Birdsall, is now actively at work on further extensions. The canal is to be largely increased in capacity, and will afford supply to the large and fruitful tract on the north side of the American, below and in Sacramento county. The length of this system is about forty-five miles.

There are several other small mining ditches that have been utilized for irrigation, but those that have been described are the principal. The map which accompanies the article will show how extensive the utilization of the old mining ditches has become.



Sketch-map showing great irrigating systems of Placer county.

capable of supplying, when completed, a large additional area of the foothill lands not covered by the present ditches. Arrangements have been made to largely increase the natural head of water owned by the canal company, in order to give additional supply during the months of June, July, August and September, when the demand is greatest for irrigation.

Concerning these improvements the Newcastle *News* says: The activity in Lower Placer will be still further accelerated when it becomes generally known that F. Birsall, the proprietor of Placer county's already extensive irrigating system, will begin next week the construction of a canal of 1000 inches capacity from the main canal at the head of Clover valley down Clover valley hill to Rocklin and some distance below. Besides this, J. E. Whitney and F. W. Butler will commence next week the building of a reservoir for the storage of water, of 7,000,000 to 10,000,000 gallons capacity, on Douglas hill, one mile east of Penryn and two miles east of Newcastle. Mr. Whitney is also engaged with teams and a force of thirty to forty men in building a large water reservoir on his estate above his magnificent raisin vineyard which will have a capacity of some 30,000,000 to 40,000,000 gallons.

By the construction and use of reservoirs to hold back the water in the mountains above, and distributing reservoirs in the foothills, the supply of water can be indefinitely increased. Numerous sites exist throughout the foothills where, with comparatively little expense, great bodies of water can be stored. As an example, J. Parker Whitney has natural locations on his estate near Rocklin which would admit of the storage of sufficient water to irrigate thousands of acres. One of these sites would make, at small expense, a lake one mile long by one-quarter of a mile wide, with a depth of fifty feet.

Connected with the Bear river canal system and forming a part of it are the water systems supplying the towns of Auburn and Newcastle, and canals are now being constructed to supply Penryn, Loomis, Rocklin and possibly Roseville with additional and abundant supply, the demand at these places and adjoining country having largely increased lately, owing to the rapidly growing area cultivated in fruit, berries and vines.

Besides the Bear river canal, another system, called the North Fork ditch, supplies a portion of Placer county lying east of the railroad and below Newcastle. This is also an early mining ditch, now utilized for irrigating purposes. This ditch takes water from the American river opposite Auburn, two or three miles below the junction of the middle and north fork of the American. This ditch was built in 1852-53 to convey water to the mines on the north bank of the American, and has carried water to within fifteen miles of Sacramento city. The water right is a valuable one, having a large and unfailing supply. This property now belongs to several residents of Sacramento, who possess ample means to develop the property and utilize the water to the best advantage.

CITY TRAVEL.

The Three Systems of the New Road.

CROSS-TOWN CONVENIENCES.

Golden Gate Park and Ocean Beach as the Great Magnetic Points.

Though the public has taken an active, and, in many cases, a personal interest in the construction of the first cross-town cable road, and though the newspapers have contained a number of articles upon it, descriptive and commentatorial, the peculiar fact remains that there is not one man in a hundred who can tell its exact route. For the matter of that, there is not one in a hundred either who can tell its exact name. The reasons for this are that the course of the road has been several times altered; that as it proved it is singularly roundabout and that the name itself has been changed from its original title.

To attend to the name first: Ordinarily the line is called the Powell-street road, when really its corporate name is the Cliff House and Ferries Railway Company. This, however, is following the popular fashion of referring to most of the street railroads. The North Beach and Mission railroad, for instance, is always called briefly the North Beach line, and who would think of speaking of the Turk-street line as the Central?

Next as to its route or routes, rather, and to explain these properly it should be stated that the Cliff House and Ferries Railway Company is composed of two systems as regards propelling power—cable and steam-dummy—and three systems as regards district: that is, the Powell-street system, the Park and Cliff-House system, and the Clay-street hill system. The Powell-street system is actually the only one of these three that will be completely running by April 1st, if present promises are fulfilled. The park and Cliff House system will be completed at the same time only so far as the cable power is concerned, while all three systems with both horse and steam-dummy power will be in running order and open to the public on the Fourth of July.

The Powell-street system being actually completed, it will be well to commence a description of the road by paying attention to that. The terminal of this system are Market street on the south, and the bay on the north. The southern terminus is marked by a turn-table at the foot of Powell street, near the Baldwin Hotel. Two sets of cars really start from here, the cross-town cars and the Jackson-street switch-off, the one alternating with the other; but to simplify matters the reader is supposed to be standing at the turn-table waiting for a cross-town car. This car, taking the right-hand track, will run up Powell street to Jackson, then turning into that street will run westward up Jackson street to Mason, then along Mason street northwardly to Montgomery avenue, along Montgomery avenue to Taylor street, and then down Taylor street to the bay, or rather to the turn-table on Taylor and Francisco streets. Coming back the same road will be taken, going southerly until Jackson street is reached, when instead of going down that street to Powell, the car will continue on Mason, past the engine-house to Washington street, and go down that street to Powell, along which it will run until the Baldwin is reached; the car, it may be stated, having run all the time on one continuous cable.

Arrived at the Powell street turn-table from his round trip, it is next supposed that the investigator wishes to ride over the cable road portion of the Park and Cliff House system. He accordingly waits for that alternate car and getting on board rides over the Powell-street line just as he did before until Jackson street is reached, when instead of following the road down Mason street to Montgomery avenue the car, by an ingenious contrivance, is switched off at the corner of Mason and Jackson streets onto the cable that runs in a single track up Jackson street. The car then runs westerly up Jackson for twenty-two blocks until Cemetery or Central avenue is reached, when turning into that it runs southerly down to a turntable just touching California street. On the return trip the car runs back up Central avenue to Jackson street, and turning into that runs down it as far as Steiner street. At this corner the car turns off to the south, skirting Alta Plaza to Washington street, and turning into that runs down it clear to Powell street and so back to the Baldwin, this round trip, too, having been made on a second continuous cable. There is no necessity, of course, to make this round trip if by chance the passenger has got on board the wrong car, for, payment of fare entitles him to a transfer at Mason and Jackson streets to go northerly or easterly as he pleases; and again a transfer may be had at Mason and Washington to go northerly as far as the bay, but none to go easterly again up Jackson street. That is, it is one fare to go from the Baldwin to the bay or to the California-street turn-table on Central avenue, and it is one fare to go from this turn-table to the bay and to the Baldwin.

There is next to be considered the California-street steam road, a section of the Park and Cliff House system. Here again the plan of alternate cars will be in operation, the one car going to the park and the other to the Cliff House, both of them starting on California street, just west of Central avenue. The car that runs to the park will go out California street until Seventh avenue is reached, when, turning due south, it will run along just west of the Golden Gate racecourse until the limits of the park are reached, just three blocks west of the Geary-street road terminus. The car that runs to the Cliff will continue straight out California street, a distance of nearly three miles, until Thirty-second avenue is reached. Turning round an easy curve to the northward to avoid the City Cemetery, the road will run on this line until the shore is reached, a few blocks to the west of the line of the military reservation. The road from this point will skirt the cliff, turn Point Lobos and come to an end on Point Lobos avenue, just above the Cliff House and directly opposite the main entrance to Sutro heights. The return route will be the same. Here, too, a system of transfers will be in operation. All passengers coming up on the Jackson-street line will be transferred to the park-going car for the same fare, but all cliff-going passengers will be required to pay an extra 5 cents. An arrangement has also been made with the California-street line, by which the patrons of that road will be carried free to the park on presenting a transfer issued to the California-street road coming back. It is also in contemplation to transfer California-street passengers on to the Powell-street system, an arrangement which would be of particular advantage to all passengers on the California-street line when going to the Market-street theaters and vice versa.

So far, it will be seen, the Cliff House and Ferries Railway Company can really lay claim to a right to but half its name; it takes people to the cliff, but it does not carry them to the ferries or bring them thence. All this, however, has been calculated for the purchase of ten Clay-street lines, and the securing of a franchise down to the city front being the first steps in this direction. As the situation stands the passenger can ride up on the Clay-street line to Powell street and there get a surprise ride over the Powell-street system or the Park and Cliff House system in any one direction he may desire. By the Fourth of July, however, the line will have its terminus at the ferries. The impatient traveler, which, unfortunately, is not considered distinctively in the table of assessment valuations which you show me, when the Geary-street railway was extended beyond the Richmond Devisadero street road the other going down Mason street to North Beach. The returning Oaklander coming in from the park or Cliff House will come down Washington street, but instead of turning down into Powell he will continue down Washington street to Stockton and then go south a block to Clay, down which the track will be run to the ferries, this being the Clay-street Hill system. The transfers on this system include a discretionary route north or south along the Powell-street system or a trip to the park over the Park and Cliff House system, always understanding that a ride to the Cliff House means a second fare.

The attempt has been made to explain as clearly as possible the various routes and changes of this aggregation of systems, but in order to add to this explanation a map is printed with this article showing the various lines, cable and steam, of the Cliff-House and Ferries Railway Company's road. It also shows, for purposes to be hereafter mentioned, all those cable and steam roads which traverse the peninsula and lead to the Golden Gate Park and the ocean beach.

The construction of the Cliff-House and Ferries Railway Company's road indicates things. First, the unmistakable need of two cross-town cars; and, second, that the park and ocean beach are now looked upon as the ultimate and necessary aim of all systems of street-car travel. A glance at the map will show that both these propositions are true. From Market street alone, and within the space of thirteen blocks, there are already four car lines that run directly to the park—the Geary-street, the McAllister-street, the Hayes-street and the Haight-street lines. To these, when the Cliff House and Ferries road is finished, two other ways to the park will be opened, one by California street and one by Sacramento street. At the same time it will be noticed that the Powell-street line is the only cable road that crosses town north of Market street, the Larkin-street road, which is not shown, only reaching to Sutter. Between its horse-car extension along Polk street and the Powell-street cable road, a space of six blocks wide, there is no cross-town conveyance of any sort, while west of Polk street there is absolutely no cross-town convenience at all. A line along Devisadero street as an extension of the proposed Castro-street road has been spoken of, but even when that is completed it will leave a great section of thirteen blocks in width without any cross-town car. The construction of the Powell-street road will, however, surely be followed by the building of other parallel systems, and the time is not very far off when the Western Addition will be gridironed with cable roads, and when it will be as easy to go from Pacific heights to Market street and from the Alta Plaza and Lobos square districts down to the great artery of the city as it is to go to the park. The result of this checker system will naturally be to appreciate the values of all property in all directions, and especially to increase its worth in the neighborhood—that is north and south—of the park.

The beautiful slopes that lie to the south of the park and the outside lands in the same neighborhood, lands that are bound in the near future to be the site of the great seaside suburb of San Francisco, will all receive an indirect benefit from the construction of the new lines, but there is a line in contemplation that looks to a direct appreciation. It has long been felt that the great districts lying south of Market street and in the Mission have been cut off from the proper means of accessibility to these desirable localities, and it is largely for this reason that the construction of the Market-street road out in the direction of the south of the park is so much looked forward to.

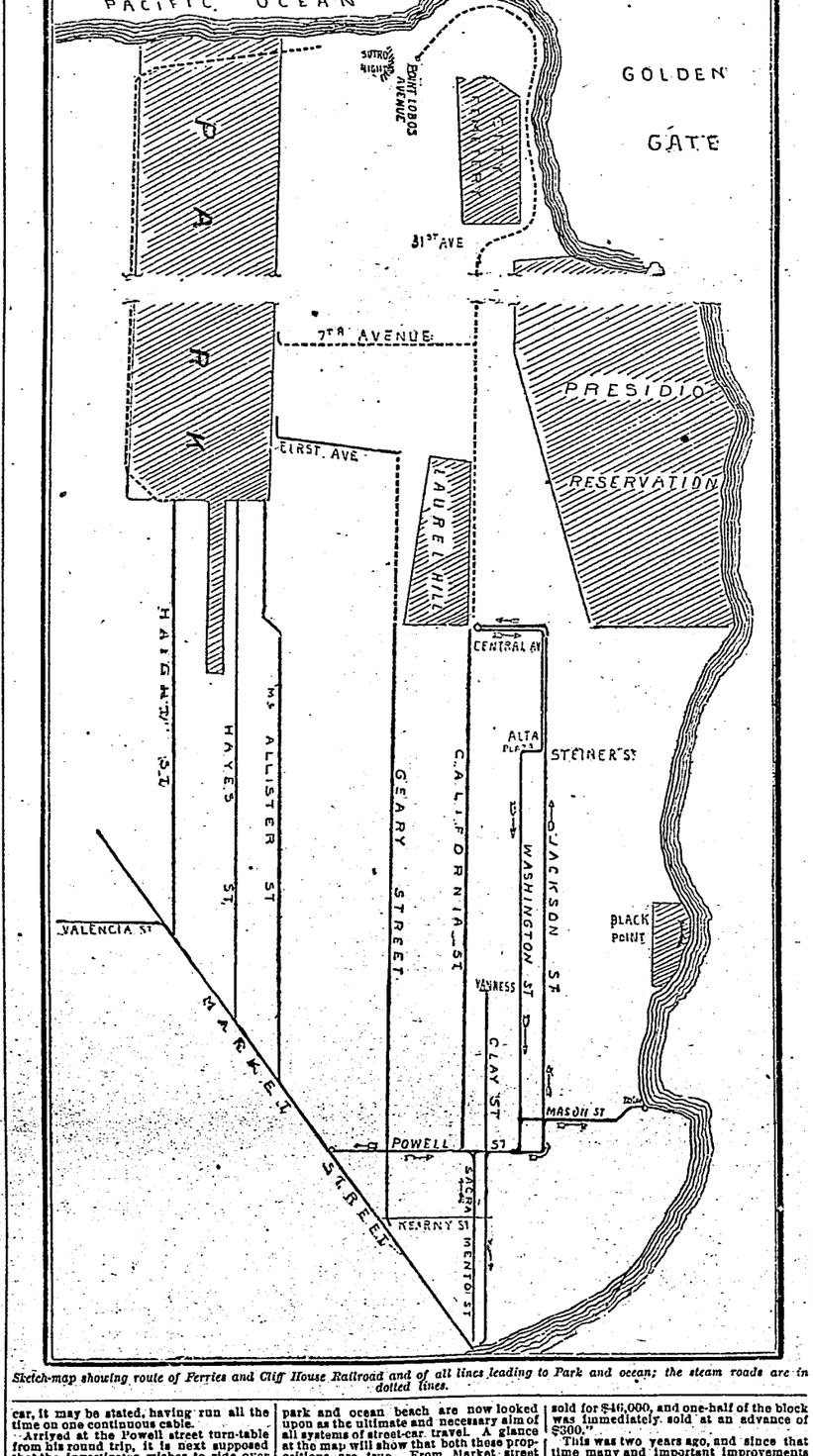
The line, however, which will be the great artery of travel from the Mission to the south of the park is that which by its franchise will start from Folsom and Seventeenth streets; will thence go up Seventeenth, crossing Market at its intersection with Castro street; then around the Park lane road to the northern fence of the San Miguel ranch; thence northwesterly to the intersection of J and Stanyan streets, and from that along J street to Seventh avenue, and in time to the ocean beach. The section of land thus opened up is that to which many people are now turning wistful eyes, and the franchise cannot fail to be one of the most valuable in the gift of the city.

How remarkably properties have been affected by the projection of the cable roads every one knows more or less accurately. Speaking in the beginning of 1886, a real estate dealer said:

"The cable railways have certainly made the Western Addition what it is, and will yet work wonderful changes in other portions of the city. Their first marked effect was to turn back the tide of population which was flowing towards Oakland. Formerly it was thought an excellent thing that the business man could leave his counting-room or office and for 30 cents be transferred across the bay to Broadway in fifty minutes, reaching his residence probably in an average of ten minutes more. The Sutter and Geary-street lines, however, gave people a new revelation. They showed that a passenger might be carried from the ferry to Golden Gate Park in twenty minutes for 5 cents. A similar surprise awaited many old fogies when the Market-street company built its Haight-street and McAllister-street branches, and the effect upon real estate was perhaps greatest on Haight at the ferries. The impetus, which, unfortunately, is not considered distinctively in the table of assessment valuations which you show me, when the Geary-street railway was extended beyond the Richmond Devisadero street building lots along its line were sold for less than $70 a foot of frontage. Now, in the same district, between California and Haight streets, the average price is $110 per foot, and in many instances the enhancement in value is greater than 50 per cent. The difference along the Haight-street route is even more marked. Five years ago I sold an entire block, 412½x275 feet, on Fillmore street for $20,000. It is to-day, without improvements, worth at least $50,000. The approach to this property is up a very steep grade, and horse-car communication would certainly never have added much to its value. Another block was sold just before the construction of the Haight-street line for $12,000. On the mere prospect that the line was to be built it was resold almost immediately to the railway company for $20,000. When the cars commenced running the company sold half of it for $30,000, and the other half is now held at $25,000. This is not an isolated case by any means. The mere expectation that the Market-street main line will some day be extended out Castro street has already caused an advance in lots within the limits of the old Rancho San Miguel. They could be bought a short time ago for $100 or less, but at a recent sale forty-six lots brought $175 each. Twenty-three lots in the same district were sold for $46,000, and one-half of the block was immediately sold at an advance of $300."

This was two years ago, and since that time many and important improvements have been made and a rise in prices has been seen which has completely overshadowed anything before known. When the Clay-street hill railway was built a full half of its route was almost devoid of houses. A photograph hanging in the company's office on Leavenworth street shows the aspect of the particular neighborhood at the time the line was completed. It is a country landscape, with the brown, barren and monotonous hillsides unbroken by any structure suggestive of the proximity of a great city. The reader does not need to be told how great a contrast to this scene it offers to-day. A nearly similar condition of things obtains now along the outer portions of Washington and Jackson street lines, but already property has begun to look up, building is everywhere active, and the prophecy of busy thoroughfares stretching clear out to the Cliff House, and of blocks of residences on each side of the park, will surely be fulfilled.

With the lines in operation in 1886, the number of passengers carried on the cable roads in that year was fully 50,000,000 people; last year that number was still further increased, and when the Cliff House and Ferries Railway systems are all in running order the total number of passengers will undoubtedly be run up to 75,000,000. This is an enormous number of people, it is true, but when it is known that the Market-street company carried 15,000,000 people in 1885 it will be seen that the estimate is rather under than over the mark. It has been well said that the construction of the cable roads of this city marks an era in its growth, and it is with an impartial but keen interest that the CHRONICLE watches the extension of these great public conveniences.



Sketch-map showing route of Ferries and Cliff House Railroad and of all lines leading to Park and ocean; the steam roads are in dotted lines.

CHRONICLE CULLINGS.

It is a queer thing that in the ethics of kinship a man usually rushes for his uncle after bidding good-bye to his ante.—*Tid-Bits.*

Miss Parloa gives a recipe for making "kisses." Another good way is to get up a game of Copenhagen.—*Norristown Herald.*

A Baltimore paper is talking about the "credit due to women." Up this way they always want the cash.—*Philadelphia Inquirer.*

Did you ever notice that a man goes to a lawyer and to a physician for precisely the same purpose—to recover.—*St. Albans Messenger.*

A St. Louis man wants a divorce because his wife snores, whistles, smokes and swears. She evidently made a mistake in being a woman.—*Detroit Free Press.*

"Hello, deacon! You layin' your plans to go to campmeetin' next summer?" "Dunno. Feared I ain't goin' to have a hoss fit to swap.—*Burlington Free Press.*

Charlie—But don't you think they're a little—er—loud, Isaacsens? Isaacsens—Loud! Loud! Dat was der body of dose clothings. Dey shpeak right out for demselfes.—*Life.*

One reason why the girl of the period knows so little about housekeeping is because the young man of the period could not be persuaded to court in a kitchen. *Milwaukee Journal.*

The poor people of suffering Ireland should not be discouraged. Adam, you know, was evicted, but his descendants have won fame and fortune just the same. *Somerville Journal.*

"How dared you sell me bad fish yesterday?" asked some angry housekeeper of her itinerant fishmonger. "'Twas your own fault, marm. I offered it to you five days before."—*London Tid-Bits.*

Wife—It would be an awful thing if that ceiling at Albany should fall, John. Husband (something of a lobbyist)—Yes, particularly if it should fall at night when the place is empty.—*The Epoch.*

Mrs. Gab—You are keeping Lent strictly, Mrs. Gad. This is the first time I have seen you on the street. Mrs. Gad—Yes, and I wouldn't be out now only the dressmakers have run short of thread.—*Omaha World.*

Miss Gushington—Do you not find Dr. Smalltalk entertaining? He is such a mimic. Mr. Sneerington (who detests the doctor)—I have often noticed that the doctor takes people off cleverly.—*Town Topics.*

"I see a buttonless shirt advertised here, John," said a wife, looking up from a paper. "What kind of a shirt is that?" "Just like mine," was the reply. And the wife resumed her reading.—*New York Graphic.*

"Oh, dear!" sighed the H and the K, "what a hard, hard world this is! We have been nearly worked to death since that "each-of-promises case." "Nonsense," said the letter I. "Look at me. You don't know what hard work is! And I've been at it since the beginning of time."—*Tid-Bits.*

"Why, Cicely, my dear, I'm so glad you called in the morning. I want you to go shopping with me," said her best friend enthusiastically. "With pleasure. What are you going to have that's new?" "Oh, nothing; but I'm going to match a braid and get some new buttons for my spring suit." "We can easily use up the forenoon. I'll be with you directly."—*Hartford Post.*

"Have you many social attractions in your far Western home?" she asked of a young man in Washington for a few days. "Social attractions?" he replied, with a hurt sound in his tone. "Social attractions! Well, I should smile. We've got eighteen saloons, and twelve parlors, and about forty other joints, where you've got to hustle to keep up with the procession." *Washington Critic.*

MISCELLANEOUS.

What Is CASTORIA

Castoria is Dr. Samuel Pitcher's prescription for Infants and Children. It contains neither Opium, Morphine nor other Narcotic substance. It is a harmless substitute for Paregoric, Drops, Infant Syrups and Castor Oil. It is Pleasant. Its guarantee is thirty years' use by Millions of Mothers. Castoria kills Worms. Castoria is the Children's Panacea—the Mother's Friend.

Castoria

Castoria cures Colic, Constipation, Sour Stomach, Diarrhœa, Eructation, Gives healthy sleep and promotes digestion, Without injurious medication.

Castoria

"Castoria is so well adapted to children that I recommend it as superior to any prescription known to me."
H. A. ARCHER, M. D., 111 So. Oxford St., Brooklyn, N.Y

The Centaur Company, 182 Fulton Street, N. Y.

MISCELLANEOUS.

HOW DO WE DIG OUR GRAVES?

We must eat or we cannot live. This we all know. But do we all know that we die by eating? It is said we dig our graves with our teeth. How foolish this sounds. Yet it is fearfully true. We are terrified at the approach of the cholera and yellow fever, yet there is a disease constantly at our doors and in our houses far more dangerous and destructive. Most people have in their own stomachs a poison, more slow, but quite as fatal as the germs of those maladies which sweep men into eternity by thousands without warning in the times of great epidemics. But it is a mercy that, if we are watchful, we can tell when we are threatened. The following are among the symptoms, yet they do not always necessarily appear in the same order, nor are they always the same in different cases. There is a dull and sleepy feeling; a bad taste in the mouth, especially in the morning; the appetite is changeable, sometimes poor and again it seems as though the patient could not eat enough, and occasionally no appetite at all; dullness and sluggishness of the mind; no ambition to study or work; more or less headache and heaviness in the head; dizziness on rising to the feet or moving suddenly; furred and coated tongue; a sense of a load on the stomach that nothing removes; hot and dry skin at times; yellow tinge in the eyes; scanty and high-colored urine; sour taste in the mouth, frequently attended by palpitation of the heart; impaired vision, with spots that seem to be swimming in the air before the eyes; a cough, with a greenish-colored expectoration; poor nights' rest; a sticky slime about the teeth and gums; hands and feet cold and clammy; irritable temper and bowels bound up and costive. This disease has puzzled the physicians and still puzzles them. It is the commonest of ailments, and yet the most complicated and mysterious. Sometimes it is treated as consumption, sometimes as liver complaint, and then again as malaria and even heart disease. But its real nature is that of constipation and dyspepsia. It arises in the digestive organs and soon affects all the others through the corrupted and poisoned blood. Often the whole body—including the nervous system—is *literally starved*, even when there is no emaciation to tell the sad story.

Experience has shown that there is but one remedy that can certainly cure this disease in all its stages, namely, Shaker Extract of Roots or Mother Seigel's Curative Syrup. It never fails, but nevertheless no time should be lost in trying other so-called remedies, for they will do no good. Get this great vegetable preparation (discovered by a venerable nurse whose name is a household word in Germany) and be sure to get the genuine article.

GIVEN UP BY SEVEN DOCTORS.

Shaker Extract of Roots or Seigel's Syrup has raised me to good health after seven doctors had given me up to die with consumption.—So writes R. F. Grace, Kirkmanville, Todd Co., Ky.

HE HEARD OF IT JUST IN TIME.

"I had been about given up to die with dyspepsia when I first saw the advertisement of Shaker Extract of Roots or Seigel's Syrup. After using four bottles I was able to attend to my business as well as ever. I know of several cases of chills and fever that have been cured by it." So writes Mr. Thos. Pullum, of Taylor, Geneva Co., Ala.

WORTH TEN DOLLARS A BOTTLE.

Mr. Thomas P. Evans, of the firm of Evans & Bro., merchants, Horntown, Accomack Co., Va., writes that he had been sick with digestive disorders for many years and had tried many physicians and medicines without benefit. He began to use Shaker Extract of Roots or Seigel's Syrup about the 1st of January, 1887, and was so much better in three weeks that he considered himself practically a well man. He adds: "I have at this time one bottle on hand, and if I could not get any more *I would not take a ten-dollar bill for it.*"

All druggists, or address A. J. White, Limited, 54 Warren St., N.Y.

MERCED The Plaza Stores.

The Fountain City

One-Price Plain-Figure Dealers.

COMPLETION OF THE

Crocker & Huffman Canal

Twenty-seven miles in Length; capable of Irrigating 1,000 Square Miles

COST $1,500,000

WATER FROM THE

Yosemite Falls

WITH NINETY FEET PRESSURE AT

MERCED The Future Manufacturing City

POWER AT NOMINAL COST. Flour Mills, Woolen Mills, Sash Factories, Machine Shops, and other MANUFACTURING ESTABLISHMENTS are in immediate contemplation.

BUILDINGS TO BE ERECTED with large rooms supplied with power for all purposes.

Lake Yosemite

A square mile of Water 30 feet deep to be well stocked with Fish

TEN MAGNIFICENT COLONIES surround the future Fountain and Manufacturing City

IN THE THERMAL BELT only five miles from the city.

FLOWING ARTESIAN WELLS at a depth of 160 feet.

NATURAL GAS only 400 feet from the surface.

RAISIN VINEYARDS, ORCHARDS from 5 to 20 acres on installments.

ORANGE GROVES from 1 to 10 acres on installments, all adjacent to the Crocker & Huffman Canal.

3,000 Choice Business and Residence Lots in MERCED AT AUCTION

Without reserve, by order of the

Pacific Improvement Company

UNDER MANAGEMENT OF

BRIGGS, FERGUSSON & CO.

TIME OF SALE

TUESDAY, April 10, 1888
WEDNESDAY, April 11, 1888
THURSDAY, April 12, 1888

Sale to begin on Tuesday, at 10 o'clock P. M., and on Wednesday and Thursday at 10 o'clock A. M.

Terms of Sale One-fourth Cash; balance in three equal payments, due in six, twelve and eighteen months, with interest at the low rate of 8 per cent. per annum. A deposit of 10 per cent. will be required on the fall of the hammer; balance of cash payment to be made at the El Capitan Hotel, Merced, at the close of each day's sale, when contracts will be issued.

Title Perfect Deeds at Purchaser's Expense

GRAND EXCURSION

From SAN FRANCISCO and all principal cities and towns of the Sacramento and San Joaquin Valleys

To MERCED and Return

Excursion Tickets good on regular trains going April 9th and 10th. Limited to April 15th for return trip.

FARE from San Francisco to

$5.70 MERCED $5.70 AND RETURN

Special arrangements have been made by the MERCED BOARD OF TRADE for the accommodation of all Excursionists, TICKETS FREE to all purchasers.

ALL TICKETS *will be issued with a coupon attached, showing the amount paid; one coupon will be received from each purchaser as a credit on first payment.*

FOR MAPS, CATALOGUE AND FULL PARTICULARS, apply to

BRIGGS, FERGUSSON & CO.
Real Estate Auctioneers
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HARPER'S BAZAR PATTERNS.

General Agency for the Pacific Coast,

A. & E. SALMON,
128 Post Street.

The Picnic Season

Is coming on apace, and the joyous youth and his fair inamorata are looking forward to meandering in the flower-decked fields or joining in the merry games—all of which naturally leads us to call your attention to our immense and varied stock of

STRAW HATS

In anticipation of a very large demand this season, we have specially imported a most varied assortment of Straw Hats, and which we have marked down to

Our Usual Low Prices!

Boys' Mixed Straw Hats from 25c. up.
Boys' Fine Mackinnon Straw Hats from 50c
Men's Mixed Straw Hats from 25c. up.
Men's Fine White & Mixed Straw from 50c.
Canvas Hats, 20c.

Bargains in Underwear.

Imported Balbriggan Underwear, colored, $1 per suit—less than half-price.
Imported Balbriggan Underwear, very fine, $1 50 per suit—worth double.

The Plaza Stores

CHAS. S. FECHHEIMER,
706 to 720
KEARNY STREET.

REMEMBER! The price is PLAINLY marked on each article, from which there is no deviation. Your little child can buy as safely as you. Send for New Catalogue of Goods and Prices. Sent free to any address. Get one.

MAURICE DORE & CO.
AUCTIONEERS.

NOTICE IS HEREBY GIVEN THAT UNDER and in pursuance of the power and authority conferred upon us by the last will of ROBERT ROXBY, deceased, we will sell at

PUBLIC AUCTION,

To the highest bidder for cash in gold coin of the United States, at the AUCTION ROOMS of MAURICE DORE & CO., 412 Pine street,

THURSDAY,

THURSDAY.....MARCH 29, 1888

AT 12 O'CLOCK NOON,

The following described property, known as

Greenwich Dock Bonded Warehouses

Covering Two 50-Vara Lots, viz.:

Beginning at the northeasterly corner of Greenwich and Sansome streets, running thence easterly along the northern line of Greenwich street two hundred and seventy-five (275) feet to the westerly line of Battery street; thence northerly along said line of Battery street one hundred and thirty-seven and one-half (137½) feet; thence at right angles westerly two hundred and seventy-five (275) feet to the easterly line of Sansome street, and thence southerly along said line of S