

Development of State's Scarcid Resources San Francisco the Gateway to Magnificent Empire

CALIFORNIA'S PROGRESS FROM DAYS OF '49 TO 1913

Advancement in the Commercial and Agricultural Eras Bring Prosperity to City and Commonwealth

The prosperity, progress and future of San Francisco are dependent upon the development of the great interior of the state, of which the city is the metropolis and to which it is the gateway because of its transportation facilities and the fame of its harbor. The prosperity and supremacy of the city is assured by the tremendous development of the unsurpassed resources of the interior, but the more active San Francisco realizes this and the closer in touch she comes with the spirit of the interior the sooner will all this hoped for prosperity be realized.

California has three great physical divisions—the mountains, the valley and the sea. It is of interest to note that the development of the state was along these divisions and the three great awakenings or distinct manifestations of activity have been brought about by the discovery of the latent possibilities lying dormant in these three geographical assets.

MINING ERA
The first great awakening was in the mountains, and has to do with mining; the second great awakening was in the plain, and has to do with agriculture; the third great awakening was in the Pacific ocean, and has to do with commerce. The first began in the quest for gold in the mountains in the days of old, the days of gold, the days of '49. Then the drama changed to the great interior valleys and the interest centered in agriculture and fruit raising, and lastly attention has been centered in the great ocean of mystery which leaves the shore of the state and its great possibilities have been thrust upon the attention of Californians in a way which has caused an awakening not surpassed by the two preceding ones. As Prof. Benjamin Ide Wheeler has said, "It is the ocean that has awakened California," and the great development of the future will come from the sea.

DISCOVERY OF GOLD
The city sprang into being by reason of the first awakening. Few realize the greatness of the mineral resources of the state. It is only 65 years since the finding of the first nugget in the race at Sutter's mill. Yet within that brief period it has been demonstrated that it is impossible to place a limitation on its possibilities, and though the mineral output has steadily grown the last few years until today it is

more than \$90,000,000 annually, we may confidently expect to see the output increased until it has passed the hundred million dollar mark. In the words of one of the old miners, "California has only been scratched." The report of the geological survey shows that in 1912 the gold alone produced in California is valued at \$20,110,000. About 40 per cent comes from gold dredgers, which yield 85 per cent of all placer gold, and is steadily increasing. Of the total siliceous ore nearly \$1,200,000 is derived from the mother lode, Amador county having the largest tonnage and most productive from deep mining.

AGRICULTURAL DEVELOPMENT
It is, however, in the second awakening that San Francisco is more directly interested—the discovery of the latent possibilities of the plain and its agricultural resources. This has been termed the "rediscovery of gold." As Bancroft, the historian, has said, "Grass, gold and grain have each had their day, and the epoch of fruit and wine is upon us." The grazing period which flourished during the pastoral times before the gold discoveries was attended by a hide and tallow trade. Digging the gold developed a new community and a new community, while with grain growing and fruit raising came social refinement and higher cultivation.

In the early days most of the lands were held under Spanish and Mexican grants, consisting of vast estates of many thousands of acres, each devoted to grazing and pasture. Under American rule these Spanish grants were bought up and the valley became a great wheat field until California was rated as one of the greatest grain producing states in the union in which immense ranches were owned by one family and tilled by a few persons.

As late as 1892 it was estimated that the holdings of 100 land owners in the Sacramento valley exceeded 1,000,000 acres, or an average of 10,000 acres each.

This delayed settlement, for where one family owned such an acreage and refused to sell, 400 families could have each owned a 40-acre farm and prospered.

The growth of agriculture is vividly seen in the following figures, giving the number of farms and average size of each during the last 25 years. The total value of the same lands for 1910 was \$1,485,600,000, an increase of 108 in the decade.

The former great grainfields and grazing tracts now teem with human life. Instead of cattle and grain, we find many independent home-makers with their families, who, by the newer and more intelligent methods of diversified farming, bring from the land far greater aggregate returns for money than was ever had by large owners and advance California to the front as the richest per capita among the states and countries of the world.

Many and varied are the material factors that have contributed to this development, among which we might mention three—transportation, irrigation and the transmission of electric power.

TRANSPORTATION
The days of the prairie schooner as a mode of transcontinental travel are but little more than a half century removed from the present day service of five transcontinental routes. The story of this change, which has cost the expenditure of millions of dollars, is one of the most fascinating in California's history.

The great valleys are drained no longer by their great rivers alone but by many roads of steel, making it possible for the producer on the farms and ranches to market their produce to good advantage. Today there are in operation no less than 8,000 miles of steam roads. During late years the electric lines, of which we now have 1,800 miles, have been a tremendous factor in opening up the northern part of the state. The Northern Electric, the California Traction, the Napa Valley line, and the Petaluma and Santa Rosa have all been a tremendous boon to their various sections; while in the south the Pacific Electric, which operates suburban lines radiating from Los Angeles, with an aggregate of 77 miles of single track, has been the life blood of dozens of small towns that are now up to date and modern in every particular.

The transportation companies have not only brought people to California, but have given the rural people easy access to city and to various resorts of pleasure and created local tourist travel. Twenty-five years ago,

only 4,000 annually visited Yosemite, reaching it by 65 miles of stage, traveling over a makeshift highway, generally narrow, and cast up with loose material; whereas in 1911 the number of visitors to Yosemite was 12,530, and two railroads now run to the gates of the valley. In 1911 the steamers of Catalina Island carried 106,104 persons. During the year 1887 one small boat made occasional trips during the summer months only.

IRRIGATION
Another of the big factors in the development of the plain has been irrigation, for irrigation means small farms, intensive farming, and an advanced civilization. Irrigation is the great harbinger of co-operation, it supplies the basis of scientific agriculture. By it man asserts his control over nature. Irrigation was first introduced by the Spanish padres in 1769, but the modern development from 1870 when the Central Pacific extended its line through the San Joaquin valley. About 1880 the fruit industry began to assume importance and from this time to 1890 irrigated agriculture received its greatest impetus. During the last five years irrigation has comparatively been projected in the Sacramento valley which have brought the hum of industry and thrift to that section which has laid dormant long. The latest statistics on irrigation show the number of irrigated farms in California in 1909 to be 39,452, an increase of more than 25 per cent in 10 years. The total acreage irrigated in 1909 was 2,647,104 acres or an increase of more than 84 per cent in 10 years. The total cost of irrigated systems reported in 1910 was \$72,645,669, an increase of more than 27 per cent in the 10 years and a sum representing half the total capital invested in the manufacture of California. What has been done is but the foreshadowing of the great achievement to come.

PLANT BREEDERS
Of great interest also is the record of achievement by California in the development of plant life. This is only to be expected where fruit is produced in such abundance and under the most favorable conditions. To state the achievement attained by our fruit growers is a record of which all Californians must be proud and which is second to none in importance. It is not realized, but it is a fact, that all the fine fruits now exported from the state have been originated and perfected in California. During the last 25 years since 1887, Luther Burbank alone has added 20 varieties of flowers and shrubs and 62 varieties of fruits and vegetables to the list of plants grown in the state, all of them are on the market commercially, among which may be mentioned the Satsuma plum, white blackberry, royal walnut, crimson winter hawthorn, called the mortgage lifter by satisfied growers, the red California poppy, the Shasta daisy, and last the spineless cactus which he hopes to reclaim the desert.

Though Luther Burbank's name is so familiar it must not eclipse the great achievements of other men in this line. The Phillips cling peach was originated by Joseph Phillips in 1848 at Yuba city and has been in use 25 years

and is now bringing to the state a million dollars a year. Mr. William Thompson produced the seedless grape in 1873. The culture of this grape began in Sutter county and has been extended to almost all grape growing districts of the state. Thompson's seedless grapes are away ahead of any seedless variety and bring thousands of dollars annually to our raisin raisers. The loganberry, which is now a household word, was originated in 1881 by Judge J. H. Logan of Santa Cruz and is a cross between the California wild blackberry and a red raspberry. The mammoth blackberry was also produced by Logan from the native California berry. In the realm of bulbs and ferns no horticulturist in the world has ever made so comprehensive a study or produced such amazing results as Carl Purdy of Ukiah, who is the King of the tulip and the fern, better known in distant lands than at home. From the apparent insignificant incident of bringing two small orange trees to Riverside by a lady, Mrs. Tibbitts, which had been grafted with an unknown orange department, came the famous Washington navel which has created one of the greatest industries of the world and changed the southern desert into one of the most beautiful and prosperous countries on earth. Mrs. Tibbitts died in poverty, but today a year's citrus crop is nearly 50,000 car loads, worth \$50,000,000. Since then the citrus area of the state has been extended from Tulare county and as far north as Oroville.

ADDITIONAL FRUITS
In the last 25 years other important additional crops have been discovered and field crops of California and new areas have been found adapted to already established products. The date had long ripened in the Wolfkill orchard at Winters, in Yolo county, the farthest point north in the world where that fruit perfects itself. Mr. Swingle, an expert in the United States agricultural department was led by this to examine the possibilities of date culture in California and found an extensive area in the San Joaquin and Sacramento valleys where many valuable varieties of the date will flourish, and on our Colorado desert found natural conditions that will produce the delectable "date of light," the finest of the many varieties of that valuable fruit. He imported plants of the delectable Moor from the Mozambique oasis in the Sahara, and these are now established and fruiting in Imperial valley and prove that this fine fruit will soon become an article of export. This year 2,500 boxes were sold at 85 cents per pound and \$1 retail, said to be much superior to the imported fruit.

The Smyrna fig has in that time become an article of export by the carload. Mr. E. W. Maslin, an honorary member of the California development board, many years ago raised a seedling Smyrna fig orchard at Loomis, in Placer county. The fruit did not perfect, and he found it needed the services of the blastophaga, a minute wasp, to fertilize it. He imported the Capri figs from Greece, with this insect in hand, and strung them on his trees. Getting no immediate results, the insect was abandoned. But within the last few years the figs in that or-

chard began to ripen, and on examination it was found that the Capri fig trees were amongst the seedlings and that the blastophaga brought over in the green figs had found them and multiplied until now the Maslin orchard is the source of supply of the insect for all parts of the state. Meantime the State Board of Trade had secured the services of the United States agricultural department in the importation of fruited Capri trees, boxes and Mr. Roeding of Fresno engaged in the work of introducing and caring for such trees, until now the Smyrna fig is an established fruit.

The sugar beet and its manufacture into sugar had been established with indifferent results at Alvarado, in Alameda county. Now it is a profitable industry in many parts of the state, from the Sacramento valley to southern California.

The bringing of Imperial valley into action enlisted the interest of the United States agricultural department in experiments that have resulted in the location there of profitable cotton culture. The best variety of cotton is the long staple, known in this country as "Sea Island cotton," because it has long been grown only on islands off our south Atlantic seaboard. It had proved impossible of domestication on our cotton states on the mainland. The agricultural department sought to domesticate the Egyptian long staple cotton in those states and failed. It then tried Imperial valley and found it adapted to that region. Upon further experiment this valuable cotton has been found adapted to a wide area in Kern county, and it will doubtless be found in other areas that will make California an important cotton growing state. The Egyptian long staple cotton is now imported into this country for thread, machine lace, and other high uses of that fibre and commands a price of 30 cents a pound. As the boll weevil can not flourish in our climate, it is easily seen that California may have a monopoly in the production of this finest of all the vegetable fibres.

Tobacco raising has been established profitably at Dinuba, and its acreage is extending, and its success stimulates examination of the adaptability of other regions to this valuable crop. Early experiments by the Japanese demonstrated the adaptation of a large acreage of the Sacramento valley to rice and now that crop is being more largely planted every year and will soon be an important staple.

With sugar, rice, cotton, tobacco and the date added to our catalogue of products, California offers inducements to the greatest variety of skill and experience in agriculture of any part of the world. This variety invites a wise co-ordination of labor, and demands a sifting of immigration and a tolerant study of its capacities.

THE INFLUENCE OF THE OCEAN
The last, and that which promises to be the greatest scene of California activity, is the rediscovery of the Pacific ocean.

During the last years of the dying century the whole state practically was a rural town and districts had every appearance of Sleepy Hollow. California was

as a slumbering giant. But as President Wheeler says, it was the ocean that woke it up with startling suddenness, and the awakening came in 1898. Two great events were instrumental in this. The first was the discovery of gold in Alaska and the gold rush to Alaska beginning in 1897, the second was the outbreak of the Spanish war in 1898. The first caused the equipment of hundreds of craft of all descriptions and the opening up of the Alaska trade; the second opened up relations with the Philippines and forced attention to the new factor involved in the position of the state. The famous voyage of the Oregon around the Horn brought, with startling realization, the attention of the whole nation to the remoteness of the west coast and its inaccessibility to the westships of Uncle Sam, and from this arose the strenuous demand for digging the big canal. The further interest of the world was aroused in the Pacific ocean by the Japanese-Russian war. California began to sit up and take notice. Trade relations with the orient and South America were a theme of interested discussion and with it was born the suggestion of holding a great world's exposition in commemoration of the completion of the Panama canal.

SPRINT OF 1915
The interest aroused and publicity given to California by the contest for this great prize between San Francisco and New Orleans has not only been the means of attracting the attention of the whole nation, but also of cementing and binding together all California in one great cause. In the light of the great event all petty rivalries and sectional jealousies have been forgotten. The magic number "1915" eclipsed all other issues and was just the one thing needed to centralize that happy get together spirit now permeating the state.

The opening of the Panama canal will bring the commerce and the settlers of California, the California better and the immigrants. This influx of people, many of whom will be skilled artisans, will go toward making California one of the great manufacturing states of the nation and San Francisco a great factory city, with all which that implies in increased values of suburban and city lots. The climate, natural conditions, facilities for shipping and abundant labor will make this absolutely certain. Last year the state of California produced \$1,000,000,000 worth of products. Half of this enormous amount was represented by manufactures. Last year the manufactures produced were over 11 times the value of all minerals. During the last decade the value of California manufactured products has increased 105 per cent. From this some idea may be gathered of the great increase that will come.

The opening of the canal, therefore, will change the status of California from an agricultural state to a great manufacturing commonwealth also. It will place within the reach of these manufactures all the seaport cities of the Atlantic seaboard, as well as those in the Pacific ocean, and these, added to the markets in the 37 South American republics, will place California in the vanguard of the world and will make her second to none.

CITY FORTUNATE IN TRANSPORTATION U. R. R. IS ENDEAVORING TO ALL CITIZENS

The street railway system of a community is to it what their legs are to its individuals. The activities and success in life of individuals and collections of individuals are probably more dependent upon their means of locomotion than upon any other thing.

San Francisco is particularly fortunate in its transportation system, for it is unsurpassed by that of any city in the country and equaled, if at all, by few. It has the heaviest roadbeds, the most up to date cars, the best routing system, the most effective time schedules, and all this in spite of several physical difficulties to be overcome, such as many steep hills, often awkward distributions of centers of movement and location of the business section at a point whence radiation extends over but a limited arc.

Such is the condition today. Every one knows what it was on the morning of April 18, 1906. Never before in the world's history of street transportation has such a wonderful rehabilitation taken place. And it has been effected in the face of the most tremendous difficulties, not only physical, but human, for throughout this great rebuilding—really rebuilding—the United Railroads has been opposed repeatedly by inimical interests, which, while doing nothing for the city themselves, have placed every obstruction they could in the path of the company, which is the largest single investor and the largest employer of labor in San Francisco. Its enemies have always been prompted by selfish motives. The United Railroads has been public spirited from the start, as its record, to be referred to in part later on, will show. It has reaped dividends, yes, for great enterprises do not invest capital from philanthropy, but it has likewise invested millions—\$13,500,000 in the last seven years—in reconstruction and betterments which redound to the city's benefit. Every extension of its service means an extension of the residential sections and the multiplication of homes. Also, it means the increase of fine office buildings down town by providing more tenants, to whom it gives better transportation facilities. No factor of municipal prosperity and advancement within the last decade has been greater than the United Railroads.

SYSTEM WIPED OUT
Let us examine some of the facts in the case: At the time the United Railroads was formed by the amalgamation of the principal existing street railway companies, the surface transportation of San Francisco was provided, in the main, by old fashioned, slow moving cable cars of relatively small capacity. The routings were unsatisfactory, the transfer systems, if systems they may be called, were awkward in many instances, the territory provided with transportation facilities was much smaller than it is now. As soon as the United Railroads had perfected its organization and got down to smooth running order, improvements began to appear in every direction. These improvements became more and more noticeable, when, a few months later, came the crash of April 1, 1906. In a few seconds the whole system was ruined. Then began a task that was simply gigantic, but the manner in which it was performed will remain standard for many a long year.

At the time, President Patrick Calhoun was in the east, the situation here being left in the hands of his assistant, Thornwell Mullally, a young giant fitted to a gigantic labor. He performed it magnificently. The very day after the earthquake he had a few cars running in some of the outlying districts. By April 21, while the flames were still destroying in many places, he had them running in Fillmore and a few

other streets, where transportation was vital, and by April 26 transportation was practically restored where most needed.

GREELY'S ACKNOWLEDGMENT

Referring to this great task, Major General A. W. Greely, senior officer of the army in this city at the time, said:

"Considering the difficulties encountered, the most remarkable accomplishment of reconstruction and re-establishment of car service known in street railway history was here exemplified by the United Railroads of San Francisco."

Before relating what was done in performing this work, attention must be called to what the company did at its own expense, without one cent of return and with the one object of helping the stricken city on its feet.

When Thornwell Mullally was rudely awakened in his apartments at the Palace hotel at 5:15 a. m. April 18, 1906, by the shock of the earthquake, after securing the books and other valuables of the company, which had been in the Rialto building, he lost no time in communicating with the mayor, to whom he offered the services of 2,000 uniformed, reliable men employed by the company, for special police or any other service that they might perform for the public welfare. At the same time he issued the following appeal to his men themselves:

ORDER TO EMPLOYEES
San Francisco is in peril. Fire is sweeping over the city, destroying property. Acts of vandalism are being committed. The United Railroads places itself at the service of San Francisco. The United Railroads calls upon all employees, as United Railroads men and as citizens of San Francisco, to do all in their power to aid at this time. All men are asked to report as soon as possible to General Manager Chapman at Market and Valencia streets, uniformed men in full uniform, all men with their badges.

By Thornwell Mullally, assistant to president.

The services of the men were accepted and they were organized into an auxiliary patrol, covering the whole city and doing fine work.

Then followed a series of public spirited acts. Mullally sent to Sacramento, chartered a schooner, loaded it with \$14,000 worth of provisions, brought it to the city and gave the provisions to the refugee camps. Then he opened a free relief station at the Turk and Fillmore streets car barn, where bread, meat and coffee were served free to all who applied. Streetcars not in use were placed in convenient localities and turned over as shelter to poor people who could not pay rent for new quarters. Thousands of refugees were permitted to sleep in car barns and power plants.

These and many other acts of humanity and good citizenship were done by the United Railroads at the very time when it was taxed to the utmost in protecting its own property and striving to restore transportation.

WORK AS FIRE FIGHTERS
The first thing to be done was to lessen the havoc to the company's property. Gangs of men were sent to the threatened power houses and car barns.

An example of the character of work these men had to do was in the case of the Bryant and Sixteenth streets power house, where for three days and nights the fire fighters, with water pumped from the bay, drenched the buildings and succeeded in saving them, thus permitting the resumption of service April 21. The houses at Turk and Fillmore streets, Sutter and Polk streets, Washington and Mason

streets, were centers of similar valiant effort, with varying success. The Valencia street car barn was destroyed, in spite of the most obstinate defense.

The cars which were started in outlying districts, where no particular harm had been done. A couple of days later cars were started along Fillmore street, and then at once appeared the hand of the business enemy, raised in obstruction at the very time when the United Railroads was striving to restore transportation. Enemies of the light and power committee of the committee of fifty raised the point that it was dangerous to have the electric current on in that region. It was some time before this objection was over-

come, to be followed quickly by another, even more remarkable. As soon as cars began to run the company gave notice that for the present no fares would be collected; that passengers would be carried free. It was then objected that, by so doing, the cars would become so overcrowded that travel would be unendurable and unsatisfactory. To overcome this the company responded by agreeing to accept fares, but announced that all proceeds from fares would be turned over to the relief committee, which was done for a long period, the company retaining no compensation for itself.

275 MILES OF TRACK
At the time of the great fire the company had about 275 miles of track in operation, about 84 being in the burned district. These 84 miles were destroyed. They have since been replaced, and about 25 miles additional built, making about 275 miles of track now in use. The work of restoring these 84 miles down town was beset with difficulties. During the early months there were no proper offices, no telephones, no shops near by. The overtaxed railroads were unable to bring ties enough as needed, so they had to be bought in the north and shipped down by water. Crushed rock for the road was scarce, so the company had to find relief by quarrying its own rock found in its roadway near Land's End.

Another obstruction was a serious strike by Greek laborers, which had to be repressed by stern measures.

Most of the supplies had to be brought great distances from the east. On one day in May 87 carloads of material were en route between St. Louis and this city.

When one looks back upon those days and compares the situation then with that now, the work that the United Railroads has accomplished may be appreciated. At this time its trackage is unsurpassed. It consists of the standard 109 pound Trolley rail in most streets, and of 141 pound rails in the streets where the travel is heavy, such as Market, Mission, Fillmore and part of Valencia street. The old and new laid tracks are paved with basalt rock and the ornamental poles in Market and Sutter streets are of the type so much admired in Paris.

Attention must be called here to the fact that the company has contributed, either directly or indirectly, to much of the city's own improvements by the cessation of its service while said improvements were being made, and by its share in altering or developing sewer systems.

POWER PLANT BOUGHT
Since April, 1906, the United Railroads has placed in commission 330 new cars of large size and latest type, which contribute to swiftness of travel. Among them are nearly 100 of the latest pay-as-you-enter cars. When these were first adopted the usual enemies of the company made the usual outcry. This time they claimed that the sole object of the purchase was to save nickels. The fact of the matter is that even the most captious are now forced to admit that these cars give more room inside of them, are more quickly loaded and discharged, move more rapidly and save the passengers the annoyance

of having the conductor crowd back and forth among them and of being called upon more than once to get a fare.

The company has rebuilt the North Beach power house and has added to it two 5,000 kilowatt Curtis turbines and a 4,000 kilowatt phase-changing machine and a 50 ton Morgan crane. It has rebuilt and added large units to the Turk and Fillmore street, the Bryant avenue, the Geneva avenue and the Millbrae substations and the Washington and Mason streets cable power house, and has made important additions and improvements at the Pacific avenue cable power house and the Geneva avenue shops.

One of the most important steps was the purchase of the Stanislaus Electric Power company by the United Railroads' interests and the contract with that company to supply power for many years to come. This power is generated near Angels Camp and is brought 150 miles to this city. The plant is equipped with three 12,000 horse power Pelton water wheels, operated under a head of 1,400 feet. Not only is the power needed for the United Railroads, but this assured for a long time in the future, but power is also provided for other commercial uses in San Francisco.

The United Railroads employs an army of men. The operation of its cars alone calls for 2,000 motor-men and conductors, in addition to which hundreds more are engaged in the outside industries of the corporation, such as maintenance of way, car barns, power stations, shops, construction and repair of track, and many other details. During the first year after the fire of April, 1906, 1,000 men were employed in reconstruction, and this number was increased, as material arrived, until it reached 5,300 four months after the disaster. It was held at the latter figure for a long time, the pay of the average laborer ranging from \$2.25 to \$2.50 a day, with leading men receiving as much as \$7 a day.

MUCH OPPOSITION
The above is a mere outline of the work of rehabilitation done by the United Railroads during the period immediately following the fire, which destroyed at a blow what the company had acquired at large cost but little more than a year before. This modern phoenix now appears before us as a superb example of up to date street railway system, constantly bettering its already admirable service.

What it has accomplished has been accomplished in the face of some of the bitterest attacks ever experienced by such a public service corporation. The United Railroads was hardly formed when it began to feel the attacks of rival interests. But a few months after the resumption of service, in the autumn of 1906, came a strike that grew to large proportions before it was ended. The following summer there came another, even more serious, but there again the determination of President Calhoun won a victory so decided that the carmen's union, which conducted it, was itself destroyed, organized labor of other classes themselves repudiating the action of the striking carmen, who violated not only their contract with the company, but the rules of their own organization. Then came the months of warfare upon the company by business enemies, which lasted for several years, ending in another victory for the United Railroads.

FRIENDLY WITH CITY
During all these periods of strife the company kept steadily on along its path of progress and betterment. The acquisition of new rails, new overhead equipment, new cars, did not end with the replacement of those destroyed in 1906. It keeps steadily on and will continue to do so, the unwavering policy of the company being to meet and to anticipate the growth of the city. To the company this growth must largely look, for the better the

transportation service, the faster the growth of business and the faster the development of residential districts, both nearby and outlying. New avenues of traffic must be opened up for rapid transit, rolling stock must be kept up to the minute of development. The routing of cars, the determination of headways, the expedition of traffic, the lengthening of hours of operation, are but some of the great problems to be studied deeply and determined to advantage. The relations between the city and the company are reciprocal. As one prospers, so does the other. The kicker we have always with our business men, but by those acquainted with actual facts and conditions, the kicker is demonstrated that the United Railroads has done and is doing magnificent work in the development of San Francisco. It is quite evident that the vast majority of critics of the United Railroads is composed of people who are ignorant of the situation in all its phases, or those with selfish, ulterior aims, or those who are just plain, everyday cranks and knickers. There are several thousand vicious kicks made every year, but 200,000,000 passengers are carried annually by the United Railroads cars. That sheds some light on the matter of kicks.

The aim of the United Railroads has ever been to provide the best in the way of both equipment and service. When it is known that the average street rail weighs 65 pounds to the yard and that this is about the weight laid in other cities; that the average steam car rail weighs 90 pounds to the yard, the fact that the rails of the United Railroads weigh from 109 to 141 pounds to the yard proves that the company's ambitions to have the best are not limited. The same thing may be shown by the fact that the first 80 pay-as-you-enter cars cost \$600,000.

This willingness to spend money freely can not be interpreted as meaning anything but an unbounded confidence in San Francisco's future as the great world's metropolis, the leading seaport of the Pacific ocean. The United Railroads shows at every turn its absolute confidence in the San Francisco of the future.

HELPING CITY TO GROW
This confidence, so strongly exhibited, carries with it the benefit of inspiration to other heavy investors, for the owners of the United Railroads are not shortsighted or foolish men. If they are not only willing but glad to invest many millions here, it is an encouragement to others to do likewise.

Briefly summarized, here are a few things that the United Railroads has done for San Francisco since it took active hold here about eight years ago:

It began immediately to better the then archaic transit system.

Like the city, it suddenly found itself crushed to earth in April, 1906, by one of the greatest catastrophes in history, yet within a week had resumed service.

It gave freely of food, lodging and transportation to the sufferers.

It vastly facilitated the work of recovery from disaster.

It invested many millions of dollars in the work of rehabilitation of its own properties, which carried with it material aid in the rehabilitation of the city.

It gave employment to thousands of men, at good wages, for long periods.

It steadily improved its service, which resulted in quickening the commerce of the city and encouraged building, both of residential and business structures. It shortened the time of transit between business and residential districts and continues to do so. It put on "owl" cars for the first time in the city's history.

It continues at the present time to extend and improve its service, each extension and improvement tending to extend and improve the city.