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THE OUTLOOK IN SOUTHERN CALIFORNIA.

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FROM the northern limit of California to the southern is about the same distance as from Portsmouth, New Hampshire, to Charleston, South Carolina. Of these two coast lines, covering nearly ten degrees of latitude, or over seven hundred miles, the Atlantic has greater extremes of climate and greater monthly variations, and the Pacific greater variety of productions. The State of California is, however, so mountainous, cut by longitudinal and transverse ranges, that any reasonable person can find in it a temperature to suit him the year through. But it does not need to be explained that it would be difficult to hit upon any general characteristic that would apply to the stretch of the Atlantic coast named, as a guide to a settler looking for a home: the description of Massachusetts would be wholly misleading for South Carolina. It is almost as difficult to make any comprehensive statement about the long line of the California coast.

It is possible, however, limiting the inquiry to the southern third of the State—an area of about fifty-eight thousand square miles, as large as Maine, New Hampshire, Massachusetts, Connecticut, and Rhode Island—to answer fairly some of the questions oftenest asked about it. These relate to the price of land, its productiveness, the kind of products most profitable, the sort of labor required, and its desirability as a place of residence for the laborer, for the farmer or horticulturist of small means, and for the man with considerable capital. Questions on these subjects cannot be answered categorically, but I hope to be able, by setting down my own observations and using trustworthy reports, to give others the material on which to exercise their judg-

ment. In the first place, I think it demonstrable that a person would profitably exchange one hundred and sixty acres of farming land east of the one-hundredth parallel for ten acres, with a water right, in southern California.

In making this estimate I do not consider the question of health or merely the agreeability of the climate, but the conditions of labor, the ease with which one could support a family, and the profits over and above a fair living. It has been customary in reckoning the value of land there to look merely to the profit of it beyond its support of a family, forgetting that agriculture and horticulture the world over, like almost all other kinds of business, usually do little more than procure a comfortable living, with incidental education, to those who engage in them. That the majority of the inhabitants of southern California will become rich by the culture of the orange and the vine is an illusion; but it is not an illusion that twenty times its present population can live there in comfort, in what might be called luxury elsewhere, by the cultivation of the soil, all far removed from poverty and much above the condition of the majority of the inhabitants of the foreign wine and fruit producing countries. This result is assured by the extraordinary productiveness of the land, uninterrupted the year through, and by the amazing extension of the market in the United States for products that can be nowhere else produced with such certainty and profusion as in California. That State is only just learning how to supply a demand which is daily increasing, but it already begins to command the market in certain fruits. This command of the market in the future will depend upon itself, that is, wheth-

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YUCCA-PALM AND DATE PALM.

er it will send east and north only sound wine, instead of crude, ill-cured juice of the grape, only the best and most carefully canned apricots, nectarines, peaches, and plums, only the raisins and prunes perfectly prepared, only such oranges, lemons, and grapes and pears as the Californians are willing to eat themselves. California has yet much to learn about

fruit-raising and fruit-curing, but it already knows that to compete with the rest of the world in our markets it must beat the rest of the world in quality. It will take some time yet to remove the unfavorable opinion of California wines produced in the East by the first products of the vineyards sent here.

The difficulty for the settler is that he cannot "take up" ten acres with water in California as he can one hundred and sixty acres elsewhere. There is left little available government land. There is plenty of government land not taken up and which may never be occupied, that is, inaccessible mountain and irreclaimable desert. There are also little nooks and fertile spots here and there to be discovered which may be pre-empted, and which will some day have value. But practically all the arable land, or that is likely to become so, is owned now in large tracts, under grants or by wholesale purchase. The circumstances of the case compelled associate effort. Such a desert as that now blooming region known as Pasadena, Pomona, Riverside, and so on, could not be sub-

duced by individual exertion. Consequently land and water companies were organized. They bought large tracts of unimproved land, built dams in the mountain cañons, sunk wells, drew water from the rivers, made reservoirs, laid pipes, carried ditches and conduits across the country, and then sold the land with the inseparable water right in small parcels. Thus the region became subdivided among small holders, each independent, but all mutually dependent as to water, which is the *sine qua non* of existence. It is only a few years since there was a forlorn and struggling colony a few miles east of Los Angeles known as the Indiana settlement. It had scant water, no railway communication, and everything to learn about horticulture. That spot is now the famous Pasadena.

What has been done in the Santa Ana and San Gabriel valleys will be done elsewhere in the State. There are places in Kern County, north of the Sierra Madre, where the land produces grain and alfalfa without irrigation, where farms can be bought at from five to ten dollars an acre—land that will undoubtedly increase in value with settlement and also by irrigation. The great county of San Diego is practically undeveloped, and contains an immense area, in scattered mesas and valleys, of land which will produce apples, grain, and grass without irrigation, and which the settler can get at moderate prices. Nay, more, any one with a little ready money, who goes to southern California expecting to establish himself and willing to work, will be welcomed and aided, and be pretty certain to find some place where he can steadily improve his condition. But the regions about which one hears most, which are already fruit gardens and well sprinkled with rose-clad homes, command prices per acre which seem extravagant. Land, however, like a mine, gets its value from what it will produce; and it is to be noted that while the subsidence of the "boom" knocked the value out of twenty-foot city lots staked out in the wilderness, and out of insanely inflated city property, the land upon which crops are raised has steadily appreciated in value.

So many conditions enter into the price of land that it is impossible to name an average price for the arable land of the southern counties, but I have heard good judges place it at \$100 an

acre. The lands with water are very much alike in their producing power, but some, for climatic reasons, are better adapted to citrus fruits, others to the raisin grape, and others to deciduous fruits. The value is also affected by railway facilities, contiguity to the local commercial centre, and also by the character of the settlement, that is, by its morality, public spirit, and facilities for education. Every town and settlement thinks it has special advantages as to improved irrigation, equability of temperature, adaptation to this or that product, attractions for invalids, tempered ocean breezes, protection from "northerners," schools, and varied industries. These things are so much matter of personal choice that each settler will do well to examine widely for himself, and not buy until he is suited.

Some figures, which may be depended on, of actual sales and of annual yields, may be of service. They are of the district east of Pasadena and Pomona, but fairly represent the whole region down to Los Angeles. The selling price of raisin grape land unimproved but with water at Riverside is \$250 to \$300 per acre; at South Riverside, \$150 to \$200; in the highland district of San Bernardino, and at Redlands (which is a new settlement east of the city of San Bernardino), \$200 to \$250 per acre. At Banning and at Hesperia, which lie north of the San Bernardino range, \$125 to \$150 per acre are the prices asked. Distance from the commercial centre accounts for the difference in price in the towns named. The crop varies with the care and skill of the cultivator, but a fair average from the vines at two years is two tons per acre; three years, three tons; four years, five tons; five years, seven tons. The price varies with the season, and also whether its sale is upon the vines, or after picking, drying, and sweating, or the packed product. On the vines \$20 per ton is a fair average price. In exceptional cases vineyards at Riverside have produced four tons per acre in twenty months from the setting of the cuttings, and six-year-old vines have produced thirteen and a half tons per acre. If the grower has a crop of, say, 2000 packed boxes of raisins of twenty pounds each box, it will pay him to pack his own crop and establish a "brand" for it. In 1889 three adjoining vineyards in Riverside, producing about the same average

crops, were sold as follows: the first vineyard, at \$17 50 per ton on the vines, yielded \$150 per acre; the second, at six cents a pound in the sweat boxes, yielded \$276 per acre; the third, at \$1 80 per box packed, yielded \$414 per acre.

Land adapted to the deciduous fruits, such as apricots and peaches, is worth as much as raisin land, and some years pays better. The pear and the apple need greater elevation, and are of better quality when grown on high ground than in the valleys. I have reason to believe that the mountain regions of San Diego County are specially adapted to the apple.

Good orange land unimproved but with water is worth from \$300 to \$500 an acre. If we add to this price the cost of budded trees, the care of them for four years, and interest at eight per cent. per annum for four years, the cost of a good grove will be about \$1000 an acre. It must be understood that the profit of an orange grove depends upon care, skill, and business ability. The kind of orange grown with reference to the demand, the judgment about more or less irrigation as affecting the quality, the cultivation of the soil, and the arrangements for marketing are all elements in the problem. There are young groves at Riverside, five years old, that are paying ten per cent. net upon from \$3000 to \$5000 an acre; while there are older groves which, at the prices for fruit in the spring of 1890—\$1 60 per box for seedlings and \$3 per box for navels delivered at the packing-houses—paid at the rate of ten per cent. net on \$7500 per acre.

In all these estimates water must be reckoned as a prime factor. What, then, is water worth per inch, generally, in all this fruit region from Redlands to Los Angeles? It is worth just the amount it will add to the commercial value of land irrigated by it, and that may be roughly estimated at from \$500 to \$1000 an inch of continuous flow. Take an illustration. A piece of land at Riverside below the flow of water was worth \$300 an acre. Contiguous to it was another piece not irrigated which would not sell for \$50 an acre. By bringing water to it, it would quickly sell for \$300, thus adding \$250 to its value. As the estimate at Riverside is that one inch of water will irrigate five acres of fruit land, five times \$250 would be \$1250 per inch, at which price water for irrigation has actually been sold at Riverside.

The standard of measurement of water in southern California is the miner's inch under four inches pressure, or the amount that will flow through an inch-square opening under a pressure of four inches measured from the surface of the water in the conduit to the centre of the opening through which it flows. This is nine gallons a minute, or, as it is figured, 1728 cubic feet or 12,960 gallons in twenty-four hours, and $\frac{1}{50}$ of a cubic foot a second. This flow would cover ten acres about eighteen inches deep in a year; that is, it would give the land the equivalent of eighteen inches of rain, distributed exactly when and where it was needed, none being wasted, and more serviceable than fifty inches of rainfall as it generally comes. This, with the natural rainfall, is sufficient for citrus fruits and for corn and alfalfa, in soil not too sandy, and it is too much for grapes and all deciduous fruits.

It is necessary to understand this problem of irrigation in order to comprehend southern California, the exceptional value of its arable land, the certainty and great variety of its products, and the part it is to play in our markets. There are three factors in the expectation of a crop, soil, sunshine, and water. In a region where we can assume the first two to be constant, the only uncertainty is water. Southern California is practically without rain from May to December. Upon this fact rests the immense value of its soil, and the certainty that it can supply the rest of the Union with a great variety of products. This certainty must be purchased by a previous investment of money. Water is everywhere to be had for money, in some localities by surface wells, in others by artesian wells, in others from such streams as the Los Angeles and the Santa Ana, and from reservoirs secured by dams in the heart of the high mountains. It is possible to compute the cost of any one of the systems of irrigation, to determine whether it will pay by calculating the amount of land it will irrigate. The cost of procuring water varies greatly with the situation, and it is conceivable that money can be lost in such an investment, but I have yet to hear of any irrigation that has not been more or less successful.

Farming and fruit-raising are usually games of hazard. Good crops and poor crops depend upon enough rain and not



RAISIN-CURING.

too much at just the right times. A wheat field which has a good start with moderate rain may later wither in a drought, or be ruined by too much water at the time of maturity. And, avoiding all serious reverses from either dryness or wet, every farmer knows that the quality and quantity of the product would be immensely improved if the growing stalks and roots could have water when and only when they need it. The difference would be between say twenty and forty bushels of grain or roots to the acre, and that means the difference between profit and loss. There is probably not a crop of any kind grown in the great West that would not be immensely benefited if it could be irrigated once or twice a year; and probably anywhere that water is attainable the cost of irrigation would be abundantly paid in the yield from year to year. Farming in the West with even a little irrigation would not be the game of hazard that it is. And it may further be assumed that there is not a vegetable patch or a fruit orchard East or West that would not yield better quality and more abundantly with irrigation.

But this is not all. Any farmer who attempts to raise grass and potatoes and strawberries on contiguous fields, subject to the same chance of drought or rainfall,

has a vivid sense of his difficulties. The potatoes are spoiled by the water that helps the grass, and the coquettish strawberry will not thrive on the regimen that suits the grosser crops. In California, which by its climate and soil gives a greater variety of products than any other region in the Union, the supply of water is adjusted to the needs of each crop, even on contiguous fields. No two products need the same amount of water, or need it at the same time. The orange needs more than the grape, the alfalfa more than the orange, the peach and apricot less than the orange; the olive, the fig, the almond, the English walnut, demand each a different supply. Depending entirely on irrigation six months of the year, the farmer in southern California is practically certain of his crop year after year; and if all his plants and trees are in a healthful condition, as they will be if he is not too idle to cultivate as well as irrigate, his yield will be about double what it would be without systematic irrigation. It is this practical control of the water the year round, in a climate where sunshine is the rule, that makes the productiveness of California so large as to be incomprehensible to Eastern people. Even the trees are not dormant more than three or four months in the year.

But irrigation, in order to be successful, must be intelligently applied. In unskilful hands it may work more damage than benefit. Mr. Theodore S. Van Dyke, who may always be quoted with confidence, says that the ground should never be flooded; that water must not touch the plant or tree, or come near enough to make the soil bake around it; and that it should be let in in small streams for two or three days, and not in large streams for a few hours. It is of the first importance that the ground shall be stirred as soon as dry enough, the cultivation to be continued, and water never to be substituted for the cultivator to prevent baking. The methods of irrigation in use may be reduced to three. First, the old Mexican way, running a small ditch from tree to tree without any basin round the tree. Second, the basin system, where a large basin is made round the tree, and filled several times. This should only be used where water is scarce, for it trains the roots like a brush instead of sending them out laterally into the soil. Third, the Riverside method, which is the best in the world, and produces the largest results with the least water and the least work. It is the closest imitation of the natural process of wetting by gentle rain. "A small flume eight or ten inches square of common redwood is laid along the upper side of a ten-acre tract. At intervals of one to three feet, according to the nature of the ground and the stuff to be irrigated, are bored one-inch holes, with a small wooden button over them to regulate the flow. This flume costs a trifle, is left in position, lasts for years, and is always ready. Into this flume is turned from the ditch an irrigating head of 20, 25, or 30 inches of water, generally about 20 inches. This is divided by the holes and the buttons into streams of from one-sixth to one-tenth of an inch each, making from 120 to 200 small streams. From five to seven furrows are made between two rows of trees, two between rows of grapes, one furrow between rows of corn, potatoes, etc. It may take from fifteen to twenty hours for one of the streams to get across the tract. They are allowed to run from forty-eight to seventy-two hours. The ground is then thoroughly wet in all directions and three or four feet deep. As soon as the ground is dry enough, cultivation is begun, and kept up from six to eight weeks

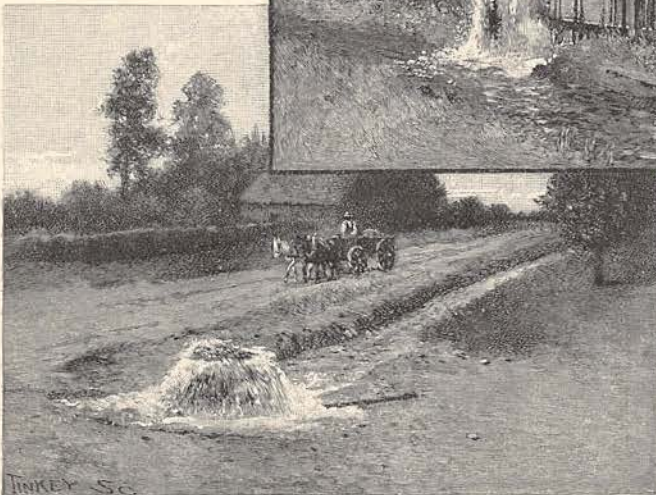
before water is used again." Only when the ground is very sandy is the basin system necessary. Long experiment has taught that this system is by far the best, and, says Mr. Van Dyke, "those whose ideas are taken from the wasteful systems of flooding or soaking from big ditches have something to learn in southern California."

As to the quantity of water needed in the kind of soil most common in southern California, I will again quote Mr. Van Dyke: "They will tell you at Riverside that they use an inch of water to five acres, and some say an inch to three acres. But this is because they charge to the land all the waste on the main ditch, and because they use thirty per cent. of the water in July and August, when it is the lowest. But this is no test of the duty of water; the amount actually delivered on the land should be taken. What they actually use for ten acres at Riverside, Redlands, etc., is a twenty-inch stream of three days run five times a year, equal to 300 inches for one day, or one inch steady run for 300 days. As an inch is the equivalent of 365 inches for one day, or one inch for 365 days, 300 inches for one day equals an inch to twelve acres. Many use even less than this, running the water only two or two and a half days at a time. Others use more head; but it rarely exceeds 24 inches for three days and five times a year, which would be 72 multiplied by five, or 360 inches, a little less than a full inch for a year for ten acres."

I have given room to these details because the Riverside experiment, which results in such large returns of excellent fruit, is worthy of the attention of cultivators everywhere. The constant stirring of the soil, to keep it loose as well as to keep down useless growths, is second in importance only to irrigation. Some years ago, when it was ascertained that tracts of land which had been regarded as only fit for herding cattle and sheep would by good ploughing and constant cultivation produce fair crops without any artificial watering, there spread abroad a notion that irrigation could be dispensed with. There are large areas, dry and cracked on the surface, where the soil is moist three and four feet below the surface in the dry season. By keeping the surface broken and well pulverized the moisture rises sufficiently to insure a crop.

Many Western farmers have found out this secret of cultivation, and more will learn in time the good sense of not spreading themselves over too large an area; that 40 acres planted and cultivated will give a better return than 80 acres planted and neglected. Crops of various sorts are raised in southern California by careful cultivation with little or no irrigation, but the idea that cultivation alone will bring sufficiently good production is now practically abandoned, and the al-

there is no exception to the rule that continual labor, thrift, and foresight are essential to the getting of a good living or the gaining of a competence. No doubt speculation will spring up again. It is inevitable with the present enormous and yearly increasing yield of fruits,



IRRIGATION BY PIPE SYSTEM.



IRRIGATION BY ARTESIAN WELL SYSTEM.

the better intelligence in vine culture, wine-making, and raisin-curing, the growth of marketable oranges, lemons, etc., and the consequent rise in the value of land. Doubtless fortunes will be made

most universal experience is that judicious irrigation always improves the crop in quality and in quantity, and that irrigation and cultivation are both essential to profitable farming or fruit-raising.

It would seem, then, that capital is necessary for successful agriculture or horticulture in southern California. But where is it not needed? In New England? In Kansas, where land which was given to actual settlers is covered with mortgages for money absolutely necessary to develop it? But passing this by, what is the chance in southern California for laborers and for mechanics? Let us understand the situation. In California

by enterprising companies who secure large areas of unimproved land at low prices, bring water on them, and then sell in small lots. But this will come to an end. The tendency is to subdivide the land into small holdings—into farms and gardens of ten and twenty acres. The great ranches are sure to be broken up. With the resulting settlement by industrious people, the cities will again experience "booms"; but these are not peculiar to California. In my mind I see the time when this region (because it will pay better proportionally to cultivate a small area) will be one of small farms, of neat cottages, of industrious homes. The

owner is pretty certain to prosper—that is, to get a good living (which is independence) and lay aside a little yearly—if the work is done by himself and his family. And the peculiarity of the situation is that the farm or garden, whichever it is called, will give agreeable and most healthful occupation to all the boys and girls in the family all the days in the year that can be spared from the school. Aside from the ploughing, the labor is light. Pruning, grafting, budding, the picking of the grapes, the gathering of the fruit from trees, the sorting, packing, and canning, are labor for light and deft hands, and labor distributed through the year. The harvest, of one sort and another, is almost continuous, so that young girls and boys can have, in well-settled districts, pretty steady employment—a long season in establishments packing oranges; at another time, in canning fruits; at another, in packing raisins.

It goes without saying that in the industries now developed, and in others as important which are in their infancy (for instance, the culture of the olive for oil and as an article of food, the growth and curing of figs, the gathering of almonds, English walnuts, etc.), the labor of the owners of the land and their families will not suffice. There must be as large a proportion of day-laborers as there is in other regions where such products are grown. Chinese labor at certain seasons has been a necessity. Under the present policy of California this must diminish, and its place be taken by some other. The pay for this labor has always been good. It is certain to be more and more in demand. Whether the pay will ever approach near to the European standard is a question, but it is a fair presumption that the exceptional profit of the land, owing to its productiveness, will for a long time keep wages up.

During the "boom" period all wages were high, those of skilled mechanics especially, owing to the great amount of building on speculation. The ordinary laborer on a ranch had \$30 a month and board and lodging; laborers of a higher grade, \$2 to \$2 50 a day; skilled masons, \$6; carpenters, from \$3 50 to \$5; plasterers, \$4 to \$5; house-servants, from \$25 to \$35 a month. Since the "boom," wages of skilled mechanics have declined at least 25 per cent., and there has been less demand for labor generally, except in con-

nection with fruit raising and harvesting. It would be unwise for laborers to go to California on an uncertainty, but it can be said of that country with more confidence than of any other section that its peculiar industries, now daily increasing, will absorb an increasing amount of day-labor, and later on it will remunerate skilled artisan labor.

In deciding whether southern California would be an agreeable place of residence there are other things to be considered besides the productiveness of the soil, the variety of products, the ease of outdoor labor distributed through the year, the certainty of returns for intelligent investment with labor, the equability of summer and winter, and the adaptation to personal health. There are always disadvantages attending the development of a new country and the evolution of a new society. It is not a small thing, and may be one of daily discontent, the change from a landscape clad with verdure, the riotous and irrepressible growth of a rainy region, to a land that the greater part of the year is green only where it is artificially watered, where all the hills and unwatered plains are brown and sere, where the foliage is coated with dust, and where driving anywhere outside the sprinkled avenues of a town is to be enveloped in a cloud of powdered earth. This discomfort must be weighed against the commercial advantages of a land of irrigation.

What are the chances for a family of very moderate means to obtain a foothold and thrive by farming in southern California? I cannot answer this better than by giving substantially the experience of one family, and by saying that this has been paralleled, with change of details, by many others. Of course, in a highly developed settlement, where the land is mostly cultivated, and its actual yearly produce makes its price very high, it is not easy to get a foothold. But there are many regions—say in Orange County, and certainly in San Diego—where land can be had at a moderate price and on easy terms of payment. Indeed, there are few places, as I have said, where an industrious family would not find welcome and cordial help in establishing itself. And it must be remembered that there are many communities where life is very simple, and the great expense of keeping up an appearance attending life elsewhere need not be reckoned.



GARDEN SCENE, SANTA ANA.

A few years ago a professional man in a New England city, who was in delicate health, with his wife, and five boys all under sixteen, and one too young to be of any service, moved to San Diego. He had in money a small sum, less than a thousand dollars. He had no experience in farming or horticulture, and his health would not have permitted him to do much field work in our climate. Fortunately he found in the fertile El Cajon Valley, fifteen miles from San Diego, a farmer and fruit-grower who had upon his place a small unoccupied house. Into that house he moved, furnishing it very simply with furniture bought in San Diego, and hired his services to the landlord. The work required was comparatively easy, in the orchard and vineyards, and consisted largely in superintending other laborers. The pay was about enough to support his family without encroaching on his little capital. Very soon, however, he made an arrangement to buy the small house and tract of some twenty

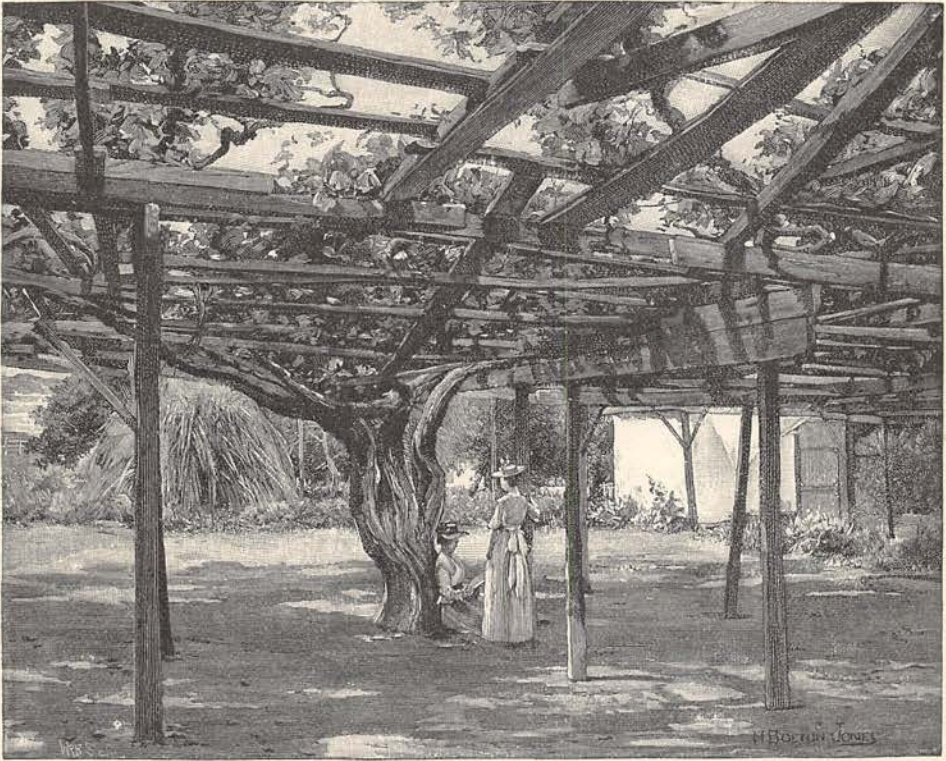
acres, on which he lived, on time, perhaps making a partial payment. He began at once to put out an orange orchard and plant a vineyard; this he accomplished with the assistance of his boys, who did practically most of the work after the first planting, leaving him a chance to give most of his days to his employer. The orchard and vineyard work is so light that a smart intelligent boy is almost as valuable a worker in the field as a man. The wife, meantime, kept the house and did its work. House-keeping was comparatively easy; little fuel was required except for cooking; the question of clothes was a minor one. In that climate wants for a fairly comfortable existence are fewer than with us. From the first, almost, vegetables, raised upon the ground while the vines and oranges were growing, contributed largely to the support of the family. The out-door life and freedom from worry insured better health, and the diet of fruit and vegetables, suitable to the climate, reduced the

cost of living to a minimum. As soon as the orchard and the vineyard began to produce fruit, the owner was enabled to quit working for his neighbor, and give all his time to the development of his own place. He increased his planting; he added to his house; he bought a piece of land adjoining which had a grove of eucalyptus, which would supply him with fuel. At first the society circle was small, and there was no school. But the incoming of families had increased the number of children, so that an excellent public school was established. When I saw him he was living in conditions of comfortable industry; his land had trebled in value: the pair of horses which he drove he had bought cheap, for they were Eastern horses; but the climate had brought them up, so that the team was a serviceable one in good condition. The story is not one of brilliant success, but to me it is much more hopeful for the country than the other tales I heard of sudden wealth or lucky speculation. It is the founding in an unambitious way of a comfortable home. The boys of the family will branch out, get fields, orchards, vineyards of their own, and add to the solid producing industry of the country. This orderly, contented industry, increasing its gains day by day, little by little, is the life and hope of any state.

It is not the purpose of this paper to describe southern California. That has been thoroughly done; and details, with figures and pictures in regard to every town and settlement, will be forthcoming on application, which will be helpful guides to persons who can see for themselves, or make sufficient allowance for local enthusiasm. But before speaking further of certain industries south of the great mountain ranges, the region north of the Sierra Madre, which is allied to southern California by its productions, should be mentioned. The beautiful Antelope Plains and the Kern Valley (where land is still cheap and very productive) should not be overlooked. The splendid San Joaquin Valley is already speaking loudly and clearly for itself. The region north of the mountains of Kern County, shut in by the Sierra Nevada range on the east and the Coast Range on the west, substantially one valley, fifty to sixty miles in breadth, watered by the King and the San Joaquin, and gently sloping to the north, say for two hundred miles,

is a land of marvellous capacity, capable of sustaining a dense population. It is cooler in winter than southern California, and the summers average much warmer. Owing to the greater heat, the fruits mature sooner. It is just now becoming celebrated for its raisins, which in quality are unexcelled; and its area, which can be well irrigated from the rivers and from the mountains on either side, seems capable of producing raisins enough to supply the world. It is a wonderfully rich valley in a great variety of products. Fresno County, which occupies the centre of this valley, has 1,200,000 acres of agricultural and 4,400,000 of mountain and pasture land. The city of Fresno, which occupies land that in 1870 was a sheep ranch, is the commercial centre of a beautiful agricultural and fruit region, and has a population estimated at 12,000. From this centre were shipped, in the season of 1890, 1500 car loads of raisins. In 1865 the only exports of Fresno County were a few bales of wool. The report of 1889 gave a shipment of 700,000 boxes of raisins, and the whole export of 1890, of all products, was estimated at \$10,000,000. Whether these figures are exact or not, there is no doubt of the extraordinary success of the raisin industry, nor that this is a region of great activity and promise.

The traveller has constantly to remind himself that this is a new country, and to be judged as a new country. It is out of his experience that trees can grow so fast, and plantations in so short a time put on an appearance of maturity. When he sees a roomy, pretty cottage overrun with vines and flowering plants, set in the midst of trees and lawns and gardens of tropical appearance and luxuriance, he can hardly believe that three years before this spot was desert land. When he looks over miles of vineyards, of groves of oranges, olives, walnuts, prunes, the trees all in vigorous bearing, he cannot believe that five or ten years before the whole region was a waste. When he enters a handsome village, with substantial buildings of brick, and perhaps of stone, with fine school-houses, banks, hotels, an opera-house, large packing-houses, and warehouses, and shops of all sorts, with tasteful dwellings and lovely ornamented lawns, it is hard to understand that all this is the creation of two or three years. Yet these surprises meet the traveller at



GRAPE-VINES ON THE GROUNDS OF MR. MAGEE, MONTECITO VALLEY, SANTA BARBARA.

every turn, and the wonder is that there is not visible more crudeness, eccentric taste, and evidence of hasty beginnings.

San Bernardino is comparatively an old town. It was settled in 1853 by a colony of Mormons from Salt Lake. The remains of this colony, less than a hundred, still live here, and have a church like the other sects, but they call themselves Josephites, and do not practise polygamy. There is probably not a sect or schism in the United States that has not its representative in California. Until 1865 San Bernardino was merely a straggling settlement, and a point of distribution for Arizona. The discovery that a large part of the county was adapted to the orange and the vine, and the advent of the Santa Fe Railway, changed all that. Land that then might have been bought for \$4 an acre is now sold at from \$200 to \$300, and the city has become the busy commercial centre of a large number of growing villages, and of one of the most remarkable orange

and vine districts in the world. It has many fine buildings, a population of about 6000, and a decided air of vigorous business. The great plain about it is mainly devoted to agricultural products, which are grown without irrigation, while in the near foot-hills the orange and the vine flourish by the aid of irrigation. Artesian wells abound in the San Bernardino plain, but the mountains are the great and unfailing source of water supply. The Bear Valley Dam is a most daring and gigantic construction. A solid wall of masonry 300 feet long and 60 feet high, curving toward the reservoir, creates an inland lake in the mountains holding water enough to irrigate 20,000 acres of land. This is conveyed to distributing reservoirs in the east end of the valley. On a terrace in the foot-hills a few miles to the north, 2000 feet above the sea, are the Arrow-head Hot Springs (named from the figure of a gigantic "arrow-head" on the mountain above), already a favorite resort for health

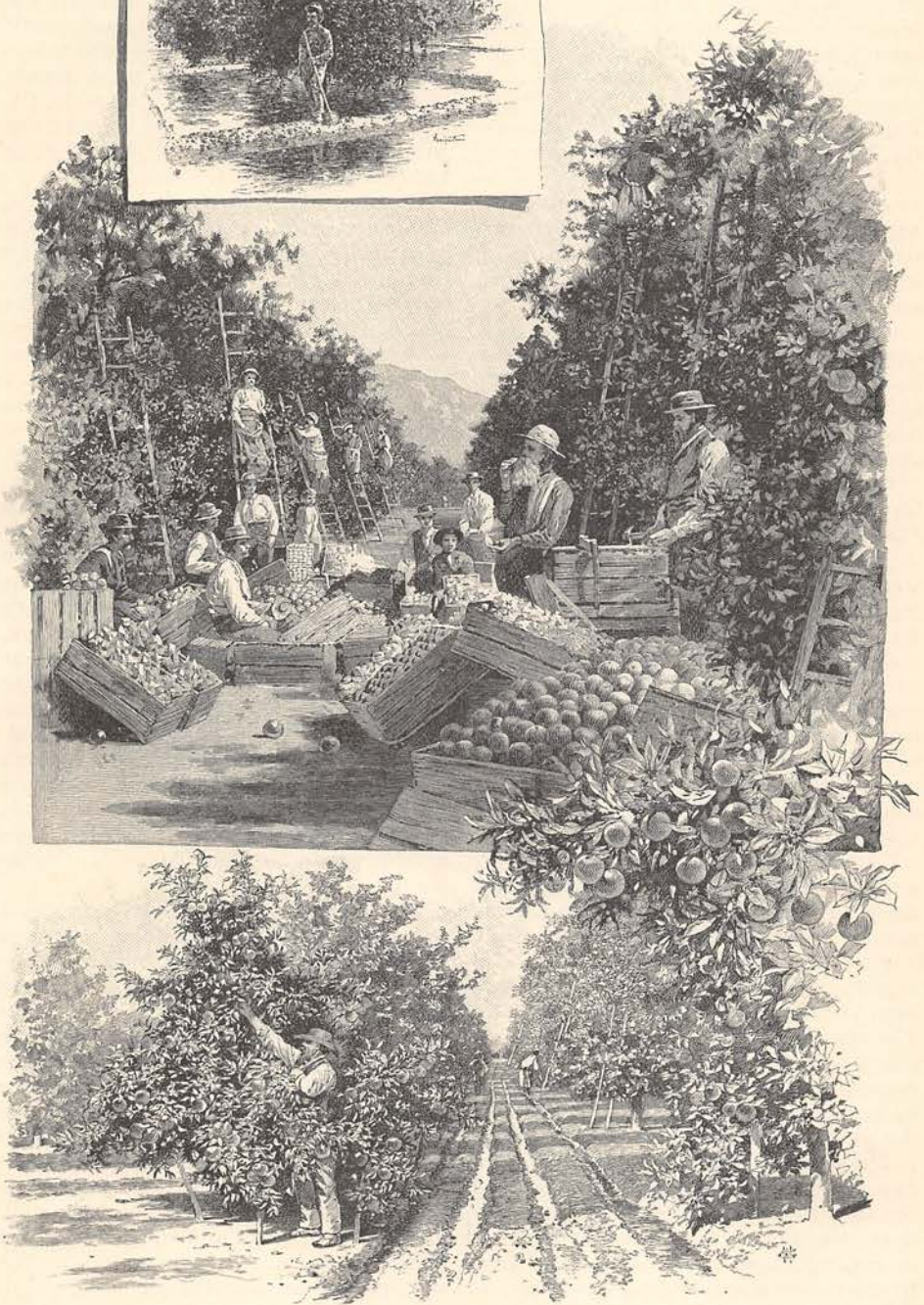
and pleasure. The views from the plain of the picturesque foot-hills and the snow peaks of the San Bernardino range are exceedingly fine. The marvellous beauty of the purple and deep violet of the giant hills at sunset, with spotless snow, lingers in the memory.

Perhaps the settlement of Redlands, ten miles by rail east of San Bernardino, is as good an illustration as any of rapid development and great promise. It is devoted to the orange and the grape. As late as 1875 much of it was government land, considered valueless. It had a few settlers, but the town, which counts now about 2000 people, was only begun in 1887. It has many solid brick edifices and many pretty cottages on its gentle slopes and rounded hills, overlooked by the great mountains. The view from any point of vantage of orchards and vineyards and semi-tropical gardens, with the wide sky-line of noble and snow-clad hills, is exceedingly attractive. The region is watered by the Santa Ana River and Mill Creek, but the main irrigating streams, which make every hill-top to bloom with vegetation, come from the Bear Valley Reservoir. On a hill to the south of the town, the Smiley Brothers, of Catskill fame, are building fine residences, and planting their 125 acres with fruit trees and vines, evergreens, flowers, and semi-tropic shrubbery in a style of landscape-gardening that in three years at the farthest will make this spot one of the few great show-places of the country. Behind their ridge is the San Mateo Cañon, through which the Southern Pacific Railway runs, while in front are the splendid sloping plains, valleys, and orange groves, and the great sweep of mountains from San Jacinto round to the Sierra Madre range. It is almost a matchless prospect. The climate is most agreeable, the plantations increase month by month, and thus far the orange-trees have not been visited by the scale, nor the vines by any sickness. Although the groves are still young, there were shipped from Redlands in the season of 1889-90 80 car loads of oranges, of 286 boxes to the car, at a price averaging nearly \$1000 a car. That season's planting of oranges was over 1200 acres. It had over 5000 acres in fruits, of which nearly 3000 were in peaches, apricots, grapes, and other sorts called deciduous.

Riverside may without prejudice be re-

garded as the centre of the orange growth and trade. The railway shipments of oranges from southern California in the season of 1890 aggregated about 2400 car loads, or about 800,000 boxes, of oranges (in which estimate the lemons are included), valued at about \$1,500,000. Of this shipment more than half was from Riverside. This has been, of course, greatly stimulated by the improved railroad facilities, among them the shortening of the time to Chicago by the Santa Fe route, and the running of special fruit trains. Southern California responds like magic to this chance to send her fruits to the East, and the area planted month by month is something enormous. It is estimated that the crop of oranges alone in 1891 will be over 4500 car loads. We are accustomed to discount all California estimates, but I think that no one yet has comprehended the amount to which the shipments to Eastern markets of vegetables and fresh and canned fruits will reach within five years. I base my prediction upon some observation of the Eastern demand and the reports of fruit dealers, upon what I saw of the new planting all over the State in 1890, and upon the statistics of increase. Take Riverside as an example. In 1872 it was a poor sheep ranch. In 1880-1 it shipped 15 car loads, or 4290 boxes, of oranges; the amount yearly increased, until in 1888-9 it was 925 car loads, or 263,879 boxes. In 1890 it rose to 1253 car loads, or 358,341 boxes; and an important fact is that the largest shipment was in April (455 car loads, or 130,226 boxes), at the time when the supply from other orange regions for the markets east had nearly ceased.

It should be said also that the quality of the oranges has vastly improved. This is owing to better cultivation, knowledge of proper irrigation, and the adoption of the best varieties for the soil. As different sorts of oranges mature at different seasons, a variety is needed to give edible fruit in each month from December to May inclusive. In February, 1887, I could not find an orange of the first class compared with the best fruit in other regions. It may have been too early for the varieties I tried; but I believe there has been a marked improvement in quality. In May, 1890, we found delicious oranges almost everywhere. The seedless Washington and Australian navels are favorites, especially for the market, on account of



ORANGE CULTURE.

Irrigating an Orchard—Packing Oranges—Navel Orange-tree Six Years Old—Irrigating an Orange Grove.

their great size and fine color. When in perfection they are very fine, but the skin is thick and the texture coarser than that of some others. The best orange I happened to taste was a Tahiti seedling at Montecito (Santa Barbara). It is a small orange, with a thin skin and a compact sweet pulp that leaves little fibre. It resembles the famous orange of Malta. But there are many excellent varieties—the Mediterranean sweet, the paper rind St. Michael, the Maltese blood, etc. The experiments with seedlings are profitable, and will give ever new varieties. I noted that the "grape fruit," which is becoming so much liked in the East, is not appreciated in California.

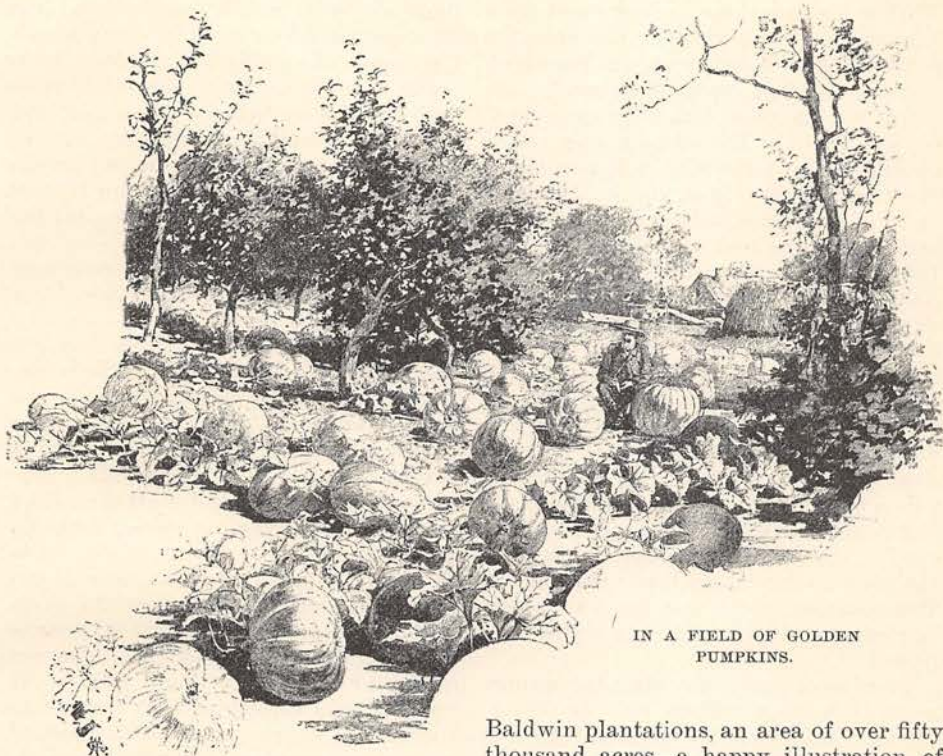
The city of Riverside occupies an area of some five miles by three, and claims to have 6000 inhabitants; the centre is a substantial town with fine school and other public buildings, but the region is one succession of orange groves and vineyards, of comfortable houses and broad avenues. One avenue through which we drove is 125 feet wide and 12 miles long, planted in three rows with palms, magnolias, the *Grevillea robusta* (Australian fern), the pepper, and the eucalyptus, and lined all the way by splendid orange groves, in the midst of which are houses and grounds with semi-tropical attractions. Nothing could be lovelier than such a scene of fruits and flowers, with the background of purple hills and snowy peaks. The mountain views are superb. Frost is a rare visitor. Not in fifteen years has there been enough to affect the orange. There is little rain after March, but there are fogs and dew-falls, and the ocean breeze is felt daily. The grape grown for raisins is the muscat, and this has had no "sickness." Vigilance and a quarantine have also kept from the orange the scale which has been so annoying in some other localities. The orange, when cared for, is a generous bearer; some trees produce twenty boxes each, and there are areas of twenty acres in good bearing which have brought to the owner as much as \$10,000 a year.

The whole region of the Santa Ana and San Gabriel valleys, from the desert on the east to Los Angeles, the city of gardens, is a surprise, and year by year an increasing wonder. In production it exhausts the catalogue of fruits and flowers; its scenery is varied by ever-new combinations of the picturesque and the luxuriant; every town boasts some special ad-

vantage in climate, soil, water, or society; but these differences, many of them visible to the eye, cannot appear in any written description. The traveller may prefer the scenery of Pasadena, or that of Pomona, or of Riverside, but the same words in regard to color, fertility, combinations of orchards, avenues, hills, must appear in the description of each. Ontario, Pomona, Puente, Alhambra—wherever one goes there is the same wonder of color and production.

Pomona is a pleasant city in the midst of fine orange groves, watered abundantly by artesian wells and irrigating ditches from a mountain reservoir. A specimen of the ancient adobe residence is on the Meserve plantation, a lovely old place, with its gardens of cherries, strawberries, olives, and oranges. From the top of San José hill we had a view of a plain twenty-five miles by fifty in extent, dotted with cultivation, surrounded by mountains—a wonderful prospect. Pomona, like its sister cities in this region, has a regard for the intellectual side of life, exhibited in good school-houses and public libraries. In the library of Pomona is what may be regarded as the tutelary deity of the place, the goddess Pomona, a good copy in marble of the famous statue in the Uffizi Gallery, presented to the city by the Rev. C. F. Loop. This enterprising citizen is making valuable experiments in olive culture, raising a dozen varieties in order to ascertain which is best adapted to this soil, and which will make the best return in oil and in a marketable product of cured fruit for the table.

The growth of the olive is to be, it seems to me, one of the leading and most permanent industries of southern California. It will give us, what it is nearly impossible to buy now, pure olive oil, in place of the cotton-seed and lard mixture in general use. It is a most wholesome and palatable article of food. Those whose chief experience of the olive is the large, coarse, and not agreeable Spanish variety, used only as an appetizer, know little of the value of the best varieties as food, nutritious as meat, and always delicious. Good bread and a dish of pickled olives make an excellent meal. The sort known as the Mission olive, planted by the Franciscans a century ago, is generally grown now, and the best fruit is from the older trees. The most suc-



IN A FIELD OF GOLDEN
PUMPKINS.

cessful attempts in cultivating the olive and putting it on the market have been made by Mr. F. A. Kimball, of National City, and Mr. Ellwood Cooper, of Santa Barbara. The experiments have gone far enough to show that the industry is very remunerative. The best olive oil I have ever tasted anywhere is that produced from the Cooper and the Kimball orchards; but not enough is produced to supply the local demand. Mr. Cooper has written a careful treatise on olive culture, which will be of great service to all growers. The art of pickling is not yet mastered, and perhaps some other variety will be preferred to the Old Mission for the table. A mature olive grove in good bearing is a fortune. I feel sure that within twenty-five years this will be one of the most profitable industries of California, and that the demand for pure oil and edible fruit in the United States will drive out the adulterated and inferior present commercial products. But California can easily ruin its reputation by adopting the European systems of adulteration.

We drove one day from Arcadia Station through the region occupied by the

Baldwin plantations, an area of over fifty thousand acres—a happy illustration of what industry and capital can do in the way of variety of productions, especially in what are called the Santa Anita vineyards and orchards, extending southward from the foot-hills. About the home place and in many sections where the irrigating streams flow one might fancy he was in the tropics, so abundant and brilliant are the flowers and exotic plants. There are splendid orchards of oranges, almonds, English walnuts, lemons, peaches, apricots, figs, apples, and olives, with grain and corn—in short, everything that grows in garden or field. The ranch is famous for its brandies and wines as well as fruits. We lunched at the East San Gabriel Hotel, a charming place with a peaceful view from the wide veranda of live-oaks, orchards, vineyards, and the noble Sierra Madre range. The Californians may be excused for using the term paradisiacal about such scenes. Flowers, flowers everywhere, color on color, and the song of the mocking-bird!

In this region and elsewhere I saw evidence of the perils that attend the culture of the vine and the fruit tree in all other countries, and from which California in the early days thought it was exempt.

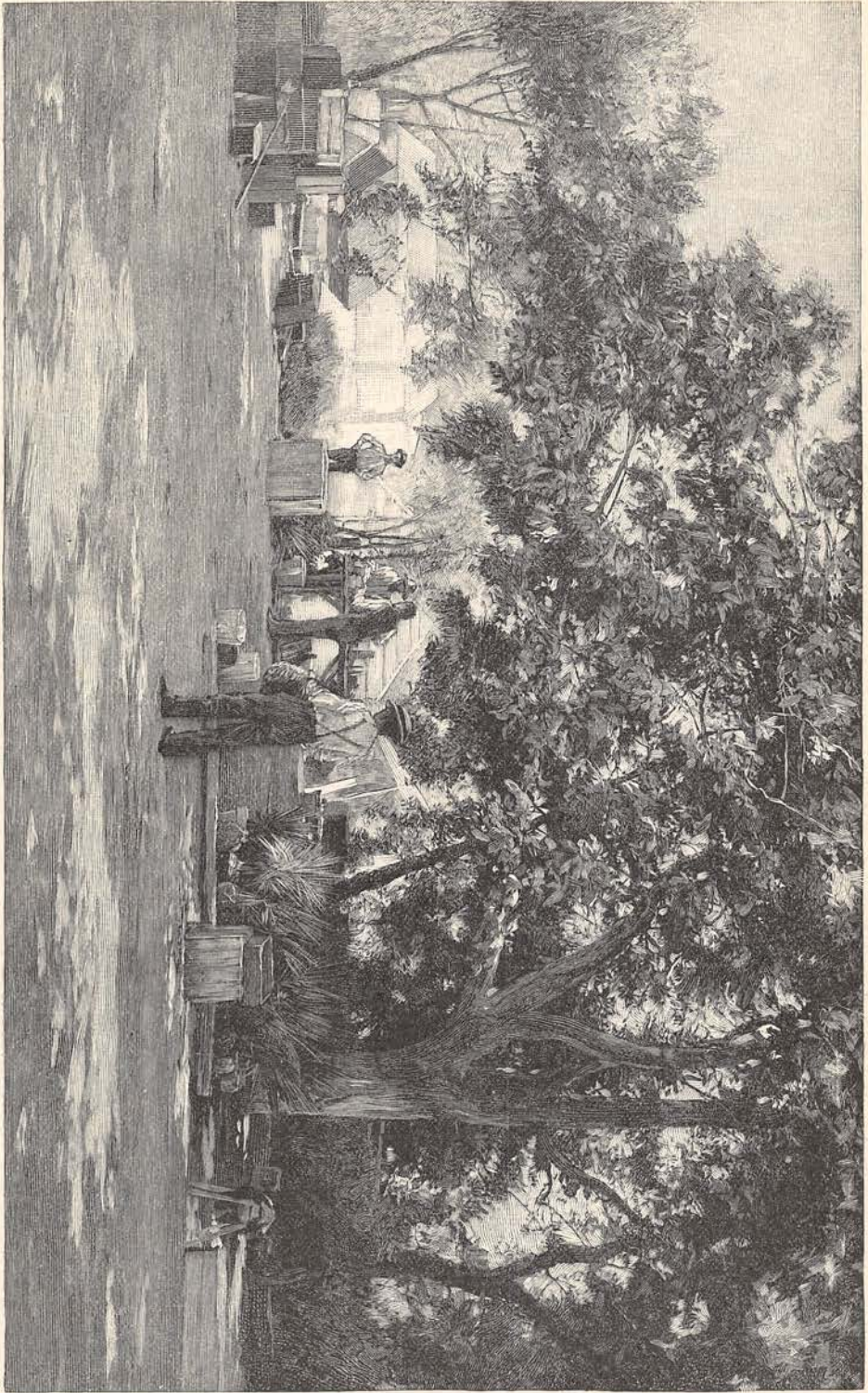
Within the past three or four years there has prevailed a sickness of the vine, the cause of which is unknown, and for which no remedy has been discovered. No blight was apparent, but the vine sickened and failed. The disease was called consumption of the vine. I saw many vineyards subject to it, and hundreds of acres of old vines had been rooted up as useless. I was told by a fruit buyer in Los Angeles that he thought the raisin industry below Fresno was ended unless new planting recovered the vines, and that the great wine fields were about "played out." The truth I believe to be that the disease is confined to the vineyards of Old Mission grapes. Whether these had attained the limit of their active life, and sickened, I do not know. The trouble for a time was alarming; but new plantings of other varieties of grapes have been successful, the vineyards look healthful, and the growers expect no further difficulty. The planting, which was for a time suspended, has been more vigorously renewed.

The insect pests attacking the orange were even more serious, and in 1887-8, though little was published about it, there was something like a panic, in the fear that the orange and lemon culture in southern California would be a failure. The enemies were the black, the red, and the white scale. The last, the *Icerya purchasi*, or cottony cushion scale, was especially loathsome and destructive; whole orchards were enfeebled, and no way was discovered of staying its progress, which threatened also the olive and every other tree, shrub, and flower. Science was called on to discover its parasite. This was found to be the Australian lady-bug (*Vedolia cardinalis*), and in 1888-9 quantities of this insect were imported and spread throughout Los Angeles County, and sent to Santa Barbara and other afflicted districts. The effect was magical. The vedolia attacked the cottony scale with intense vigor, and everywhere killed it. The orchards revived as if they had been recreated, and the danger was over. The enemies of the black and the red scale have not yet been discovered, but they probably will be. Meantime the growers have recovered courage, and are fertilizing and fumigating. In Santa Ana I found that the red scale was fought successfully by fumigating the trees. The operation is performed at night under a

movable tent, which covers the tree. The cost is about twenty cents a tree. One lesson of all this is that trees must be fed in order to be kept vigorous to resist such attacks, and that fruit-raising, considering the number of enemies that all fruits have in all climates, is not an idle occupation. The clean handsome English walnut is about the only tree in the State that thus far has no enemy.

One cannot take anywhere else a more exhilarating, delightful drive than about the rolling, highly cultivated, many-villaed Pasadena, and out to the foot-hills and the Sierra Madre Villa. He is constantly exclaiming at the varied loveliness of the scene—oranges, palms, formal gardens, hedges of Monterey cypress. It is very Italy-like. The Sierra Madre furnishes abundant water for all the valley, and the swift irrigating stream from Eaton Cañon waters the Sierra Madre Villa. Among the peaks above it rises Mount Wilson, a thousand feet above the plain, the site selected for the Harvard Observatory with its 40-inch glass. The clearness of the air at this elevation, and the absence of clouds night and day the greater portion of the year, make this a most advantageous position, it is said, to use the glass in dissolving nebulae. The Sierra Madre Villa, once the most favorite resort in this region, was closed. In its sheltered situation, its luxuriant and half-neglected gardens, its wide plantations and irrigating streams, it reminds one of some secularized monastery on the promontory of Sorrento. It only needs good management to make the hotel very attractive, and especially agreeable in the months of winter.

Pasadena, which exhibits everywhere evidences of wealth and culture, and claims a permanent population of 12,000, has the air of a winter resort; the great Hotel Raymond is closed in May, the boarding-houses want occupants, the shops and livery-stables customers, and the streets lack movement. This is easily explained. It is not because Pasadena is not an agreeable summer residence, but because the visitors are drawn there in the winter principally to escape the inclement climate of the North and East, and because special efforts have been made for their entertainment in the winter. We found the atmosphere delightful in the middle of May. The mean summer heat is 67°, and the nights are al-



PACKING CHERRIES, POMONA.

ways cool. The hills near by may be resorted to with the certainty of finding as decided a change as one desires in the summer season. I must repeat that the southern California summer is not at all understood in the East. The statement of the general equability of the temperature the year through must be insisted on. We lunched one day in a typical California house, in the midst of a garden of fruits, flowers, and tropical shrubs; in a house that might be described as half roses and half tent, for added to the wooden structure were rooms of canvas, which are used as sleeping apartments winter and summer.

This attractive region, so lovely in its cultivation, with so many charming drives, offering good shooting on the plains and in the hills, and centrally placed for excursions, is only eight miles from the busy city of Los Angeles. An excellent point of view of the country is from the graded hill on which stands the Raymond Hotel, a hill isolated but easy of access, which is in itself a mountain of bloom, color, and fragrance. From all the broad verandas and from every window the prospect is charming, whether the eye rests upon cultivated orchards and gardens and pretty villas, or upon the purple foot-hills and the snowy ranges. It enjoys a daily ocean breeze, and the air is always exhilarating. This noble hill is a study in landscape-gardening. It is a mass of brilliant color, and the hospitality of the region generally to foreign growths may be estimated by the trees acclimated on these slopes. They are the pepper, eucalyptus, pine, cypress, sycamore, redwood, olive, date and fan palms, banana, pomegranate, guava, Japanese persimmon, umbrella, maple, elm, locust, English walnut, birch, ailantus, poplar, willow, and more ornamental shrubs than one can well name.

I can indulge in few locality details except those which are illustrative of the general character of the country. In passing into Orange County, which was recently set off from Los Angeles, we come into a region of less "fashion," but one that for many reasons is attractive to people of moderate means who are content with independent simplicity. The country about the thriving village of Santa Ana is very rich, being abundantly watered by the Santa Ana River and by artesian wells. The town is nine miles from the ocean. On the ocean side the

land is mainly agricultural; on the inland side it is specially adapted to fruit. We drove about it, and in Tustin City, which has many pleasant residences and a vacant "boom" hotel, through endless plantations of oranges. On the road toward Los Angeles we passed large herds of cattle and sheep, and fine groves of the English walnut, which thrives especially well in this soil and the neighborhood of the sea. There is comparatively little waste land in this valley district, as one may see by driving through the country about Santa Ana, Orange, Anaheim, Tustin City, etc. Anaheim is a prosperous German colony. It was here that Madame Modjeska and her husband, Count Bozenta, first settled in California. They own and occupy now a picturesque ranch in the Santiago Cañon of the Santa Ana range, twenty-two miles from Santa Ana. This is one of the richest regions in the State, and with its fair quota of working population it will be one of the most productive.

From Newport, on the coast, or from San Pedro, one may visit the island of Santa Catalina. Want of time prevented our going there. Sportsmen enjoy there the exciting pastime of hunting the wild goat. From the photographs I saw, and from all I heard of it, it must be as picturesque a resort in natural beauty as the British Channel Islands.

Los Angeles is the metropolitan centre of all this region. A handsome, solid, thriving city, environed by gardens, gay everywhere with flowers, it is too well known to require any description from me. To the traveller from the East it will always be a surprise. Its growth has been phenomenal, and although it may not equal the expectations of the crazy excitement of 1886-7, 50,000 people is a great assemblage for a new city which numbered only about 11,000 in 1880. It of course felt the subsidence of the "boom," but while I missed the feverish crowds of 1887, I was struck with its substantial progress in fine, solid buildings, pavements, sewerage, railways, educational facilities, and ornamental grounds. It has a secure hold on the commerce of the region. The assessment roll of the city increased from \$7,627,632 in 1881 to \$44,871,073 in 1889. Its bank business, public buildings, school-houses, and street improvements are in accord with this increase, and show solid, vigor-



OLIVE-TREES SIX YEARS OLD.

ous growth. It is altogether an attractive city, whether seen on a drive through its well-planted and bright avenues, or looked down on from the hills which are climbed by the cable roads. A curious social note was the effect of the "boom" excitement upon the birth rate. The report of children under the age of one year was in 1887, 271 boy babies and 264 girl babies; from 1887 to 1888 there were only 176 boy babies and 162 girl babies. The return at the end of 1889 was 465 boy babies and 500 girl babies.

Although Los Angeles County still produces a considerable quantity of wine and brandy, I have an impression that the raising of raisins will supplant wine-making largely in southern California, and that the principal wine-producing will be in the northern portions of the State. It is certain that the best quality is grown in the foot-hills. The reputation of "California wines" has been much injured by placing upon the market crude juice that was in no sense wine. Great improvement has been made in the past three to five years, not only in the vine and knowledge of the soil adapted to it, but in the handling and the curing of the wine. One can

now find without much difficulty excellent table wines—sound claret, good white Reisling, and sauterne. None of these wines are exactly like the foreign wines, and it may be some time before the taste accustomed to foreign wines is educated to like them. But in Eastern markets some of the best brands are already much called for, and I think it only a question of time and a little more experience when the best California wines will be popular. I found in the San Francisco market excellent red wines at \$3 50 the case, and, what was still more remarkable, at some of the best hotels sound, agreeable claret at from fifteen to twenty cents the pint bottle.

It is quite unnecessary to emphasize the attractions of Santa Barbara, or the productiveness of the valleys in the counties of Santa Barbara and Ventura. There is no more poetic region on the continent than the bay south of Point Conception, and the pen and the camera have made the world tolerably familiar with it. There is a graciousness, a softness, a color in the sea, the cañons, the mountains there that dwells in the memory. It is capable of inspiring the same love that the Greek

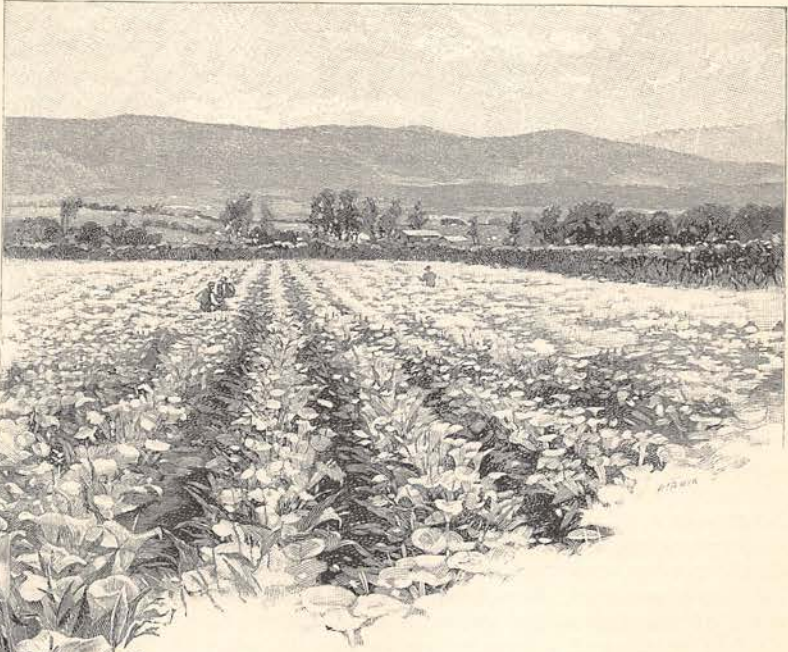
colonists felt for the region between the bays of Salerno and Naples. It is as fruitful as the Italian shores, and can support as dense a population. The figures that have been given as to productiveness and variety of productions apply to it. Having more winter rainfall than the counties south of it, agriculture is profitable in most years. Since the railway was made down the valley of the Santa Clara River and along the coast to Santa Barbara, a great impulse has been given to farming. Orange and other fruit orchards have increased. Near Buenaventura I saw hundreds of acres of Lima beans. The yield is about one ton to the acre. With good farming the valleys yield crops of corn, barley, and wheat much above the average. Still it is a fruit region, and no variety has yet been tried that does not produce very well there. The rapid growth of all trees has enabled the region to demonstrate in a short time that there is scarcely any that it cannot naturalize. The curious growths of tropical lands, the trees of aromatic and medicinal gums, the trees of exquisite foliage and wealth of fragrant blossoms, the sturdy forest natives, and the bearers of edible nuts, are all to be found in the gardens and by the road-side—from New England, from the Southern States, from Europe, from North and South Africa, southern Asia, China, Japan, from Australia and New Zealand and South America. The region is an arboreal and botanical garden on an immense scale, and full of surprises. The floriculture is even more astonishing. Every land is represented. The profusion and vigor are as wonderful as the variety. At a flower show in Santa Barbara were exhibited 160 varieties of roses all cut from one garden the same morning. The open garden rivals the Eastern conservatory. The country is new, and many of the conditions of life may be primitive and rude, but it is impossible that any region shall not be beautiful, clothed with such a profusion of bloom and color.

I have spoken of the rapid growth. The practical advantage of this as to fruit trees is that one begins to have an income from them here sooner than in the East. No one need be under the delusion that he can live in California without work, or thrive without incessant and intelligent industry, but the distinction of the country for the fruit-grower is the rapidity with which trees and vines mature

to the extent of being profitable. But nothing thrives without care, and kindly as the climate is to the weak, it cannot be too much insisted on that this is no place for confirmed invalids who have not money enough to live without work.

The immense county of San Diego is on the threshold of its development. It has comparatively only spots of cultivation here and there, in an area on the western slope of the county only, that Mr. Van Dyke estimates to contain about one million acres of good arable land for farming and fruit-raising. This mountainous region is full of charming valleys, and hidden among the hills are fruitful nooks capable of sustaining thriving communities. There is no doubt about the salubrity of the climate, and one can literally suit himself as to temperature by choosing his elevation. The traveller by rail down the wild Temecula Cañon will have some idea of the picturesqueness of the country, and, as he descends in the broadening valley, of the beautiful mountain parks of live-oak and clear running water, and of the richness both for grazing and grain of the ranches of the Santa Margarita, Las Flores, and Santa Rosa. Or if he will see what a few years of vigorous cultivation will do, he may visit Escondido, on the river of that name, which is at an elevation of less than a thousand feet, and fourteen miles from the ocean. This is only one of many settlements that have great natural beauty and thrifty industrial life. In that region are numerous attractive villages. I have a report from a little cañon, a few miles north of Escondido, where a woman with an invalid husband settled in 1883. The ground was thickly covered with brush, and its only product was rabbits and quails. In 1888 they had 100 acres cleared and fenced, mostly devoted to orchard fruits and berries. They had in good bearing over 1200 fruit trees, among them 200 oranges, and 283 figs, which yielded one and a half tons of figs a week during the bearing season, from August to November. The sprouts of the peach-trees grew twelve feet in 1889. Of course such a little fruit farm as this is the result of self-denial and hard work, but I am sure that the experiment in this region need not be exceptional.

San Diego will be to the southern part of the State what San Francisco is to the northern. Nature seems to have arranged for this, by providing a magnificent har-



SEXTON NURSERIES, NEAR SANTA BARBARA.

bor, when it shut off the southern part by a mountain range. During the town-lot lunacy it was said that San Diego could not grow because it had no back country, and the retort was that it needed no back

country, its harbor would command commerce. The fallacy of this assumption lay in the forgetfulness of the fact that the profitable and peculiar exports of southern California must go East by rail, and reach a market in the shortest possible time, and that the inhabitants look to the Pacific for comparatively little of the imports they need. If the isthmus route were opened by a ship-canal, San Diego would doubtless have a great share of the Pacific trade, and when the population of that part of the State is large enough to demand great importations from the islands and lands of the Pacific, this har-

bor will not go begging. But in its present development the entire Pacific trade of Japan, China, and the islands gives only a small dividend each to the competing ports. For these developments this fine harbor must wait, but meantime the wealth and prosperity of San Diego lie at its doors. A country as large as the three richest New England States, with enormous wealth of mineral and stone in its mountains, with one of the finest climates in the world, with a million acres of arable land, is certainly capable of building up one great seaport town. These million of acres on the western slope of the mountain ranges of the country are geographically tributary to San Diego, and almost every acre by its products is certain to attain a high value.

The end of the ridiculous speculation in lots of 1887-8 was not so disastrous in the loss of money invested, or even in the ruin of great expectations by the collapse of fictitious values, as in the stoppage of immigration. The country has been ever since adjusting itself to a normal growth, and the recovery is just in proportion to the arrival of settlers who come to work and not to speculate. I had heard that

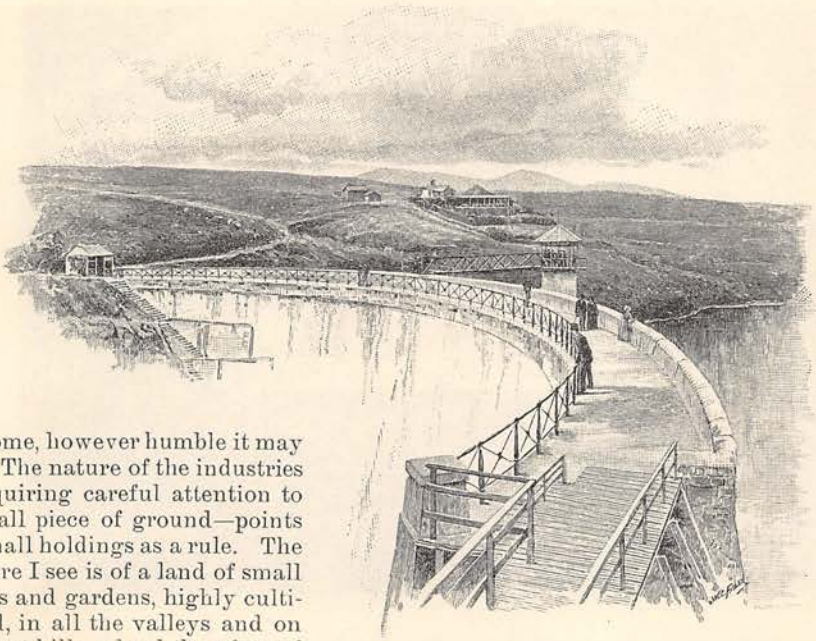
the "boom" had left San Diego and vicinity the "deadest" region to be found anywhere. A speculator would probably so regard it. But the people have had a great accession of common-sense. The expectation of attracting settlers by a fictitious show has subsided, and attention is directed to the development of the natural riches of the country. Since the boom San Diego has perfected a splendid system of drainage, paved its streets, extended its railways, built up the business part of the town solidly and handsomely, and greatly improved the mesa above the town. In all essentials of permanent growth it is much better in appearance than in 1887. Business is better organized, and, best of all, there is an intelligent appreciation of the agricultural resources of the county. It is discovered that San Diego has a "back country" capable of producing great wealth. The Chamber of Commerce has organized a permanent exhibition of products. It is assisted in this work of stimulation by competition by a "Ladies' Annex," a society numbering some five hundred ladies, who devote themselves not to æsthetic pursuits, but to the quickening of all the industries of the farm and the garden, and all public improvements. To the mere traveller who devotes only a couple of weeks to an examination of this region it is evident that the spirit of industry is in the ascendant, and the result is a most gratifying increase in orchards and vineyards, and the storage and distribution of water for irrigation. The region is unsurpassed for the production of the orange, the lemon, the raisin grape, the fig, and the olive. The great reservoir in the Cuyamaca, which supplies San Diego, sends its flume around the fertile valley of El Cajon (which has already a great reputation for its raisins), and this has become a garden, the land rising in value every year. The region of National City and Chula Vista is supplied by the reservoir made by the great Sweetwater dam—a marvel of engineering skill—and is not only most productive in fruit, but is attractive by pretty villas and most sightly and agreeable homes. It is an unanswerable reply to the inquiry if this region was not killed by the boom that all the arable land, except that staked out for fancy city prices, has steadily risen in value. This is true of all the bay region down through Otay (where a promising watch factory is es-

tablished) to the border at Tia Juana. The rate of settlement in the county outside of the cities and towns has been greater since the boom than before—a most healthful indication for the future. According to the school census of 1889, Mr. Van Dyke estimates a permanent growth of nearly 50,000 people in the county in four years. Half of these are well distributed in small settlements which have the advantages of roads, mails, and school-houses, and which offer to settlers who wish to work adjacent unimproved land at prices which experience shows are still moderate.

In this imperfect conspectus of a vast territory I should be sorry to say anything that can raise false expectations. The country is very big, and though scarcely any part of it has not some advantages, and notwithstanding the census figures of our population, it will be a long time before our vast territory will fill up. California must wait with the rest. But it seems to me to have a great future. Its position in the Union with regard to its peculiar productions is unique. It can and will supply us with much that we now import, and labor and capital sooner or later will find their profit in meeting the growing demand for California products.

There are many people in the United States who could prolong life by moving to southern California; there are many who would find life easier there by reason of the climate, and because out-door labor is more agreeable there the year through; many who have to fight the weather and a niggardly soil for existence could there have pretty little homes with less expense of money and labor. It is well that people for whom this is true should know it. It need not influence those who are already well placed to try the fortune of a distant country and new associations.

I need not emphasize the disadvantage in regard to beauty of a land that can for half the year only keep a vernal appearance by irrigation. But to eyes accustomed to it there is something pleasing in the contrast of the green valleys with the brown and gold and red of the hills. The picture in my mind for the future of the land of the sun, of the mountains, of the sea—which is only an enlargement of the picture of the present—is one of great beauty. The rapid growth of fruit and ornamental trees and the profusion of flowers render easy the making of a love-



SWEETWATER DAM.

ly home, however humble it may be. The nature of the industries—requiring careful attention to a small piece of ground—points to small holdings as a rule. The picture I see is of a land of small farms and gardens, highly cultivated, in all the valleys and on the foot-hills, a land therefore of luxuriance and great productiveness and agreeable homes. I see everywhere the gardens, the vineyards,

the orchards, with the various greens of the olive, the fig, and the orange. It is always picturesque, because the country is broken and even rugged; it is always interesting, because of the contrast

with the mountains and the desert; it has the color that makes southern Italy so poetic. It is the fairest field for the experiment of a contented community without any poverty and without excessive wealth.

SCHOOL-BOYS.

BY RICHARD E. BURTON.

I COULD wish that death might come,
 Like the respite from a task,
 Or a holiday hard won.
 Life's long schooling burdensome
 Over now, so we may bask
 In a sense of duty done,
 In a sense of freedom wide,
 Stretching out on every side.

Like to lads who count the days
 To the glad vacation-time,
 While their hearts go truanting;
 Though they walk appointed ways
 Duteously, the home bells chime
 In their ears, the home birds sing,
 And they hear their cronies call
 To some game or festival.