CHAPTER V.

DIMENSIONS AND DIVISIONS.

CALIFORNIA extends through more than ten degrees of latitude, from 32° 40′ to 42°. The length of the State is seven hundred miles, and the average width, fifty. It has a coast range equal in length to that included between Plymouth, Mass., and Charleston, S. C. The State contains one hundred and sixty thousand square miles, an area greater than that of New York, Pennsylvania and all the New England States put together, and equal to England and Ireland with a few of the smaller German principalities thrown in. In variety of climate, soil and productions it is scarcely equaled by any country or countries of similar extent, so that it has within itself the elements out of which an empire might be made.

Southern California is usually considered as extending from 36° to the southern boundary of the State. It includes seven counties: San Diego, San Bernardino, Los Angeles, Ventura, Santa Barbara, San Luis Obispo and Kern.

These counties embrace nearly one-third of the territory of the State, and contain fifty thousand square miles, or more than thirty millions of acres of land, three-fourths of which is adapted either to agricultural or grazing purposes. This is the very garden of the State. Here is the home of the orange and the fig and the olive and the pomegranate, the lemon and the almond, while there is

good reason to believe that the tea-plant, the banana and the India-rubber tree will take so kindly to the soil that their culture will be profitable. The one great want common to nearly all this region is water. Supply that to the land in sufficient quantities, and there will scarcely be a limit to the kind or extent of its productions.

San Diego, the southernmost of these counties, is in itself so extensive as to be sufficient for a principality. Although the Colorado desert covers one-third of its surface, and mountains and cañons four millions of acres more, there are still left two millions of acres suitable for farming or grazing.

The Colorado desert is a desert only for the want of water. Treeless and arid as it is, the soil is rich, and with a sufficient supply of moisture would be fertile and fruitful. The delta between the Gila and the Colorado, which is the very heart of the desert, seems once to have been the bed of the rivers that now inclose it, they having made for themselves new channels. The curious fact that this delta is lower than the Gulf of California, into which the rivers flow, will make it easy of irrigation. Hence it is very probable that the time will come when this desert will have the same history that some of the deserts of other days already have—it will be among the things that have been and are not.

Fort Yuma, a government post in the southeastern corner of this county, is at the same time the hottest and the dryest place in the State. The mercury reaches 122° in the shade in summer, and the average rain-fall is three inches per annum.

There are some strange phenomena in this part of the

county — indeed, there is much evidence to show that the greater part of southeastern California is in an unfinished state — that nature has not so far concluded the job of "fixing up" as to be ready to turn it over to man for use and occupation. Not a few of these strange things it would well repay the curious to go and see. A few miles southwest of Don Palmas there is a broad valley, bounded by ranges of hills of hard-baked red clay, called the Chocolate mountains. In this valley there is the dry bed of a lake forty miles in circumference, and nearly eighty feet below the level of the sea. This great basin is separated by a level plain, about five miles wide, from the dry beds of a number of creeks, which appear to have been once connected with it. Nearly in the center of this plain there is a lake of boiling mud, about half a mile in length by five hundred yards in width. In this curious caldron the thick, grayish, pasty earth is continually in motion, hissing and bubbling, with jets of boiling water and clouds of sulphurous vapor bursting through the tenacious crust, and rising high in the air with reports often heard at a considerable distance. The whole region around this lake appears to be underlaid with this liquid soil, for the ground trembles under foot, and subterranean noises are heard in all directions. Hot springs and sulphur deposits are numerous for many miles around.

In 1867 a large spring of pure, cool water began to flow from a fissure in a high bluff a few hundred yards from the station at Don Palmas, where there had been no water before. This strange event was heralded by no earthquake or unusual disturbance, and it was all the more strange from the fact that none of the wells previously

sunk in different parts of the desert afforded sweet water. In all cases the liquid was so impregnated with different kinds of salts and alkali as to be unfit for use.

San Diego county entered the ranks of the bullion-producing counties in 1870. Gold was found in the Isabella mountains, forty-two miles northeast of the town of San Diego. There was quite an excitement about these mines for a time, the ore being pronounced of unusual richness. A hamlet sprang up at once, as is usual in mining districts, to which the name of Julian City was given. Subsequent tests did not justify the first expectations in regard to the richness of the ore, and many incipient plans failed of execution for want of the necessary capital. San Diego, the county seat and principal town in the county, is the oldest settlement in the State. The first of that series of missions which was established along the coast by the followers of St. Francis was established here in 1769. The new settlement was placed under the tutelary guardianship of their patron saint, San Diego, the Spanish for St. James, and his name given to the mission and to the bay near which it was situated. Afterward the title suffered another repetition and was given to the county.

The San Diego mission was one of the richest on the coast. As the years passed the fathers waxed both mighty and rich. Their flocks and herds were numbered by the tens of thousands, as were also their horses and mules. Their harbor, being the best then known on the southern coast, attracted commerce, and made the town the center of whatever trade existed. This was, however, very limited, the exports being confined to tallow and hides. For

some years there was no other harbor known on the coast. The bay of San Francisco was not discovered for several years after the mission was established at San Diego, and some time was allowed to elapse, even after its discovery, before its value as a harbor was recognized.

San Diego was the general depot for all the business on the seaboard. The custom was for vessels to sail along the coast and gather up the hides which the other missions had to sell, and bring them all to San Diego, where they were stored until enough were obtained to load a vessel. Sometimes months were employed in getting together enough for a cargo. When Dana was on the coast in 1836–7 it took a year and a half to collect a load for the vessel upon which he returned to Boston.

The mission was surrounded by extensive gardens and vineyards, which were cultivated by the Indians under the direction of the fathers. The church buildings were large and fine, at least for the period in which they were erected. They are now crumbling away under the influence of "time's effacing fingers." In 1866 the bells that for three-fourths of a century had called the Indians to prayer and to labor, were taken from the belfry. Of the gardens scarcely anything remains except the olive orchard.

The old town of San Diego is near the harbor of the same name. Two miles distant is the new town, where the government stores are kept. Some substantial residences and a wharf have been built here within a few years. Notwithstanding the fine climate of San Diego, its growth has been slow, mainly because of the depressed condition of the agricultural interests in the region round about. The want of water is the blight that rests upon

this otherwise surpassingly fine country. With the second best harbor on the Pacific coast, and such a climate as can scarcely be found elsewhere in the world, the place has not kept up, in the race of progress, with other towns which are in many ways less favored. Where no water exists, or but very little, agriculture cannot flourish; and without this for a basis, no place can really prosper. It has been said of the San Diegoans that they live upon a hope and a reality, and all their great expectations for the future are based upon these two. They hope for a railroad, and they have a harbor. The Texas Pacific railroad is to make this place the point of approach to the Pacific coast. But, though the railroad may do much, it is not probable that it will bring general prosperity. There must be some plan devised for irrigating the soil, and thereby advancing agricultural interests, before the town will enjoy a healthful growth and assured well being.

Twelve miles south of San Diego is placed the stone monument erected by government to show where the territory of the United States ends and that of Mexico begins. San Diego is five hundred miles from San Francisco and one hundred and twenty-five from Los Angeles. At present there is but little to attract persons to the place except its rarely fine climate. In this respect, it is thought by those who have tried other places in California, together with the principal health-resorts in Europe, to be nearly or quite without a rival. To those who require an equable, dry and sunny climate it cannot fail to be attractive and beneficial. The average rain-fall is but ten inches per annum, and there is never enough at one time to cause

it to be muddy. There is a good hotel for the accommodation of visitors, in which the charges are moderate.

San Bernardino county is the largest in the State; yet three-fourths of the ten millions of acres which it contains consist of dry and desert-like valleys, volcanic ranges and inaccessible mountains. In the Armagoza valley there is fertile land and also good water. The Armagoza river flows northward, and sinks in the northern part of the county. This sink and the region around it form the great Death Valley, than which a more fearful, uncanny place can scarcely be imagined. It is four hundred feet below the level of the sea, a depression greater than that of the Caspian Sea, and nearly equal to that of the Dead Sea. Only seventy miles west of this depression rise some of the highest peaks of the Sierra Nevada mountains. Death Valley was probably, at some time in the past, the bed of a lake, the waters of which were heavily charged with salt and soda. A large portion of the basin is incrusted with these minerals, which in some places are several inches deep. The remainder of the surface of the valley is composed of an ash-like earth mixed with a tenacious clay, sand and alkali, and is so soft that a man cannot travel over it without difficulty, and beasts of burden cannot cross it at all.

In spots where there is least moisture, the surface is so porous that a horse sinks half-way to his knees at every step. Water can be obtained almost anywhere by digging down a few feet, but it is so saline and bitter that it can be used neither by man nor beast. There are no traces of vegetation except a few clumps of useless shrubs on the border of the valley, and no sign of animal life

except a black gnat, of which there are myriads, which enter the eyes, ears and noses of travelers, and are annoying beyond description.

The valley derives its lugubrious name from the melancholy fate of a party of emigrants who, in 1849, perished within its limits. The bones, bleached by the sun, and the cooking utensils and other accouterments of the unfortunate party are still met with in the valley. The company wandered about, no one knows how long, in search of water, and died because they found none.

This dreadful valley is one hundred miles long and twenty wide. Along its center there is a strip of salt marsh, forty-five miles long and fifteen broad. Over this whole extent a thin layer of soil covers an unknown depth of soft, gray mud. This is the sink of the Armagoza river. There is a wide circuit of country round about this valley in which no pure water can be found. Springs are not infrequent, but the water is so bitter and acrid as to be entirely useless.

The heat of this valley is fearful during the summer, and even in winter it is very great. An exploring party who visited it in January, 1869, found the temperature 90° Fahrenheit. When there is no breeze, the air becomes so dense and overcharged that respiration is painful and difficult. South of this fearful place is the sink of the Mohave. The Mohave river rises in Bear valley, and, running sometimes over and sometimes under the surface for one hundred miles, finally disappears in the earth, forming what is known as Soda lake. This is rather a peculiar sort of lake, since there is never any water in it! It is twenty miles long and five miles wide. Even in the

rainy season all the water that is brought by the Mohave river is absorbed by the alkaline soil as soon as it reaches the spot. The whole surface of the lake is so covered with the carbonate of soda that it looks like an immense bed of snow.

The southwestern part of the county is more attractive. The best agricultural district in the county is located here, and here is the beautiful valley of the San Bernardino river. This valley is fifty miles in length and twenty in breadth, with mountains on the north, south and east, which are well timbered, and make a beautiful setting for the rich lands which they inclose.

The present town of San Bernardino was laid out by the Mormons in 1847, and according to the same general plan that was afterward adopted in laying out Salt Lake city. The streets cross each other at right angles, and inclose lots which contain from one to five acres, so that the houses are all surrounded by abundant space for gardens. In 1856 nearly all the Mormons abandoned the place and went to Salt Lake.

The San Bernardino valley contains thirty-six thousand acres, and has the advantage over most parts of southern California in being well watered. There is not only running water which never fails, but artesian wells have been successfully bored. Flowing water, and that which is good, is found by boring from one hundred and fifty to three hundred feet. One of these wells will irrigate a considerable tract of land. Very good crops of grain are raised without irrigation, by taking advantage of the conditions of the season. If wheat and barley are put in the ground in time to have the benefit of a considerable part of the

winter rain, a harvest of from forty to sixty bushels to the acre can be gathered in time to put in Indian corn, so as to obtain a yield of from sixty to seventy bushels per acre, as a second crop.

Alfalfa, the Chilian clover, is cut seven times in the year, and yields, in all, from ten to fifteen tons to the acre. The semi-tropical fruits do as well in San Bernardino as at Los Angeles, while land is cheaper and better terms are offered to settlers. The climate is especially delightful. Being seventy-five miles from the ocean, the climate is more salubrious and grateful to many invalids than that of places on or near the coast.

The Riverside colony is established near San Bernardino. The company own eight thousand acres of land. They have brought sufficient water down in a flume to irrigate not only their entire tract of land, but much more besides. This colony offers many inducements to settlers, among which are an abundant supply of water, a post-office, and a school-house.

Los Angeles county has attracted more attention than any other part of southern California. The county seat and principal town has the same name as the county. The full Spanish name was Pueblo de Los Angeles (the city of the angels). The name must have been given prospectively, to be ready for a time that has not yet come, unless we can suppose that the angels care more for beautiful natural environments than for moral character; for, distinguished as the place is for the former, in the latter it is considered below par, according to the not too high standard of California.

Los Angeles is one of the oldest towns in the State,

and had laid aside its swaddling-clothes before San Francisco had any being. It is situated in a narrow valley, which is bounded on the west by low hills that extend from the Santa Monica mountains, about forty miles distant, and on the east by the rising land of the San Gabriel plain, through which the Los Angeles river flows. The old or Mexican part of the town extends up the valley nearly a mile. Here are still seen the original adobe houses, with their flat roofs covered with asphaltum, and surrounded by broad verandahs, in the common Mexican style of architecture. But elsewhere the appearance of the town shows that the Americans have appeared, and brought with them their usual energy and thrift.

All through southern California a somewhat singular distinction is made in the inhabitants. They are divided into the two classes, Americans and Californians. Under the former head are included all Anglo-Saxons, no matter whence they came or how long they have been in the country. Under the latter are embraced the Spanish and their descendants, and all mixed races, of which there are many. Under the old Spanish and Mexican rule the pure Castilians constitute the aristocracy of the country, and they are still first among Californians. The hybrid descendants of the Mexicans and Indians have the additional sobriquet of "Greasers" bestowed upon them.

Both the Los Angeles and San Gabriel rivers are by courtesy said to flow into the ocean, and are so represented on the maps; but as a matter of fact neither of them reaches that grand receptacle, but both lose themselves in the sand on the way. The San Gabriel after being lost once finds itself again, and makes a second effort to reach

the ocean, but finally succumbs to destiny and the sand, and goes down to rise no more.

In the valley of the Los Angeles the land produces without artificial irrigation for a considerable distance each side of the river. The surface is only seven or eight feet above the water-bed, and the soil is of a loose, sandy nature; so the trees send their fibres down till they reach the water-bed, and from thence draw their supplies of moisture. The arrangements for irrigation around Los Angeles are quite extensive and complete. The mountain streams are tapped, and the water taken hither and thither to give drink to the grape-vines and to the orange trees. These irrigating ditches form not an ungraceful part of the scene as it appears in riding about from orchard to orchard and vineyard to vineyard. The water is clear and limpid, and runs along with alacrity as though in haste to execute its benevolent mission.

It is not easy to conceive anything more beautiful than the orange groves in this region in February and March, when the trees are laden with their yellow fruit, which shines through the rich glossy leaves of the trees like golden stars in a dark sky. It is easy to transmute these yellow oranges into yellower gold.

Los Angeles is at present the center of the orange-growing business in California. The fruit will probably do just as well in San Bernardino, but the experiment has not been very thoroughly tried as yet. It does not thrive well anywhere on the coast, the winds from the sea being too cold. Even in Santa Barbara and the region around, which is the best sheltered of any place on the coast, oranges do not grow well except in protected places,

such as a cañon inclosed by mountains or in some way shut in and sheltered from the winds. A few miles from Santa Barbara Col. Hollister is trying the experiment in a cañon thus situated.

But at Los Angeles the orange finds itself at home, with but little to interfere with its constant prosperity. The trees come into bearing at from seven to ten years of age; when they are twelve years old, and thence on, they are expected to average twenty dollars per tree per annum. The price of oranges in San Francisco ranges from twenty to thirty dollars per thousand, the best sometimes being as high as thirty-five dollars per thousand. It is rather surprising to people coming from the east to find oranges so near the place where they are produced selling at so much higher prices than they do in New York and other eastern cities. Los Angeles oranges are seldom retailed at less than fifty cents per dozen, and oftener bring seventy-five cents. As yet there seems to be no danger of the supply exceeding the demand. An inferior kind of orange, brought from the islands, retails in San Francisco at twenty-five cents per dozen, and this is the lowest price at which the fruit is ever sold.

It is easy to see what a mine of wealth an orange orchard is at such rates. Sixty trees to the acre, and allowing one thousand oranges as the average yield per tree, would give a gross result of twelve hundred dollars. But as a matter of fact, trees in well-kept orchards sometimes average fifteen hundred oranges each. But let us take the lower estimate. It is found that one man can take care of twenty acres. Add to his wages the expense of picking, boxing, freight and commission, all of which

could not exceed three hundred dollars, and there would be left a net gain of nine hundred dollars per acre. How much surer and better an orange orchard is than a gold mine! For the former is absolutely beyond a contingency. Although young trees are at rare intervals injured by frost, when they have gained the strength and power of endurance which two or three years of growth give them they are entirely safe, and if the arrangements for irrigation are sufficient there is absolutely nothing to harm them or come in the way of their yielding a full crop every year.

Mr. Wolfskill, one of the oldest American settlers, has a grove containing two thousand trees, which, when sixteen years old, averaged fifteen hundred oranges per tree, and has continued to yield about the same each year since. Mr. Wilson has a grove of sixteen hundred and fifty trees, some of which have borne as many as four thousand oranges, and the average has been the same as in Mr. Wolfskill's orchard — fifteen hundred to the tree.

As a compensation for the orange tree being so late in coming into bearing, it lives long and continues to bear to extreme old age. A tree in the vicinity of the San Gabriel mission, twelve miles from Los Angeles, bore six thousand oranges when it was in the neighborhood of ninety years of age.

A gentleman in Los Angeles, in 1873, sold twelve hundred dollars' worth of oranges from the trees on half an acre. These trees probably received extra care, and some coaxing, in order to bring about such results. Hitherto but little attention has been paid to grafting. All the orange orchards of which mention has been made were

grown from the seed. The market has as yet been always good, and the price large for such oranges as were produced in that way; but I was told by an intelligent practical farmer, who has gone to Los Angeles within a few years, and is starting there a large orange orchard, that there is the same necessity and advantage in grafting oranges that there is in the case of apples and other fruits. It was his opinion that as the supply increased, the demand would be more dainty and a better quality of fruit required.

In order to show how the time required for oranges and English walnuts to come into bearing may be tided over, it may be worth while to state the plans and experiences of the gentleman to whom reference has just been made. In the year 1868 Mr. Wolfskill and his partner purchased three thousand acres of land in the Los Angeles valley, about four miles from the town. For this land they paid from four to eight dollars per acre — an average of about six dollars. In four years from the time of purchase, so rapidly had land appreciated in that vicinity, thirty dollars per acre could have easily been obtained for the whole tract. A large orange orchard was set out, and also orchards of English walnuts, almonds, and a locust grove for a supply of timber. The land lies on both sides of the Los Angeles river, and requires no irrigation. Artesian wells have been sunk and a sufficient supply of water for watering stock, and other uses, easily obtained. But, no part of the ranch is as yet productive. Meanwhile two families must have their support, and in one of them there are daughters approaching womanhood to be educated. The entire capital of the two partners

was invested in the land, except so much as was put into a "band" of sheep. These sheep are the bread-winners while the orange and the walnut trees are getting ready to take the burden upon themselves.

The sheep also buy the young orange trees and the walnuts needed for planting the orchards. They are not pastured on the ranch, but sent away under the care of shepherds to El Monte and elsewhere, to get their living off land that nobody owns — at least, nobody save that impersonal sort of an owner, the United States Government. During the last two or three years there has been no more profitable way of investing money in California than by putting it into sheep. He who had them was sure of a large profit on his capital once, if not twice, in the year.

A mile or two beyond the mission of San Gabriel is Sunny Slope, the estate of J. L. Rose, president of the Southern District Agricultural Society. This is confessedly the finest place in the region. A ride through avenues of walnuts, of olives and of oranges, while on each side of the drive the water is running merrily along on its way to do its duty in irrigating the orchards and vineyards, brings the visitor to the house, which is shaded by tall eucalyptus trees, and wide-spreading, beautiful pepper trees. Standing on the front verandah one looks down a broad avenue, overshadowed on each side by magnificent orange trees. This is *par excellence* the orange avenue. It extends a mile, with double rows of trees on each side. Mr. Rose has in all between six and seven thousand orange trees, but only a comparatively small part of them have come into bearing. He has one hundred and fifty acres in vine-

yards, wherein grow one hundred and thirty-five thousand vines, from which he made last year one hundred thousand gallons of white wine and three thousand gallons of brandy. A part of the crop that he sent to market last year consisted of two hundred and fifty thousand oranges, fifty thousand lemons, and twenty-five thousand pounds of English walnuts. Besides these tropical fruits he raises apples, pears and peaches in considerable quantities, and in addition to all these, pomegranates, figs, nectarines, apricots and olives.

The income from English walnuts is estimated at from six hundred to one thousand dollars per acre; from olives, at from two hundred to five hundred dollars; the vineyards produce from ten to fifteen thousand pounds per acre. This crop has never failed since vines were first set out by the fathers nearly a century ago. But Los Angeles is too far from a market for grape-raising to be profitable, except for making wine. Those who do not make wine themselves sell their grapes at the vineyards to those who do. The fruit sells in such cases at from one dollar to one dollar and twenty-five cents per hundred pounds. Mr. Rose irrigates his orchards every six weeks, and plows and hoes after each irrigation. This constant working is one of the reasons of the abundant bearing. As water is a fertilizer, the ground is kept rich as well as mellow. Weeds have no chance to grow, to absorb the strength of the soil; indeed, they do not seem to prosper in California; it is one of the peculiarities observable everywhere. In the northern part of the State, a spot of ground left uncultivated for a season is covered with an abundant crop of

wild oats. In the south the alfilerilla improves every chance to get a foot-hold.

To show what the possibilities of southern California are to the enterprising, industrious immigrant, it may be well to give, in brief, the history of Anaheim, a German settlement established in 1857. This village is twenty-four miles east of Wilmington, eight miles from the sea, and three from the Santa Ana river. Fifty men in San Francisco, of different occupations and persuasions, but all Germans, agreed together to buy eleven hundred and sixty-five acres of land in Los Angeles county, southwest of the town of the same name. The site of the village was, at the time of purchase, a dry, sandy, barren plain, no better than thousands of acres lying around it. The leader of the enterprise was a Mr. Hansen, of Los Angeles, a German of culture and ability, who had lived many years in California and knew well the nature of the enterprise in which he embarked. The land was bought for two dollars per acre, and divided into fifty lots, with streets between them. Each lot contained twenty acres. A town was laid out in the center with sixty building lots — one for each shareholder and ten for public purposes. The lots were all fenced by planting willows, sycamores and poplars, and one half of each lot was set out in grape-vines. With the first payment of stock the land was paid for. For three years Mr. Hansen superintended the improvements, while the stockholders continued in the pursuit of their various avocations in San Francisco. Indians and Mexicans were hired to do the work, and with their help the vines were set out, and an irrigating canal seven miles long was excavated, together with four hundred and fifty miles of subsidiary ditches, and twenty-five

miles of feeders for them. These arrangements secured the thorough irrigation of the whole tract.

Fruit trees of different kinds were also set out. In 1860 the assessments were all paid in. Each stockholder had paid the amount of twelve hundred dollars. The lots were then assessed, the value being fixed by the location or other incident that affected their worth, and were drawn by the stockholders. Whoever drew a lot that was estimated at more than twelve hundred dollars paid the amount of the overplus to him who had drawn one worth less than that amount. The owners then took possession, and went to work. In 1870 there were one million grape-vines growing in the settlement, most of which were in bearing. They produced annually four hundred thousand gallons of wine and ten thousand gallons of brandy. There were ten thousand fruit trees of different kinds growing. Every one of the fifty lots contained a comfortable homestead, and the village had a population of about four hundred, and contained a good public school, a post-office and a church. Each of the lots was valued at ten thousand dollars, and could not be purchased at any price.

The distance by the stage route from Los Angeles to San Buenaventura is seventy miles; yet between the two places there is no village and not even a post-office. The latter place is the principal town in Ventura county, which is a new county, set off from Santa Barbara in 1873. Those who named the county did wisely in abbreviating the unwieldy cognomen with which the town is incumbered. This latter, to which the fathers gave so extensive a title, was the seat of one of their missions.

The church and some of the other buildings still remain, and are in a sufficiently good state of repair to be used. There are three large and very old palm trees growing near the church, the largest I saw in California. They are from thirty to forty feet in height, and six or eight feet in circumference. These and an olive orchard remain to give their testimony in regard to the thrift and the taste of those old Spanish padres. The palm trees look very grand, growing up, as they do, straight and limbless to the top, which is crowned with a large tuft of palmetto leaves. The priests contrive to have boys go up these trees and gather leaves for sacramental purposes on Palm Sunday, thereby saving themselves from the cheat that is practiced in our more northern climates.

San Buenaventura contains about one thousand inhabitants, and is steadily growing. Situated as it is at the natural outlet of the wonderfully rich valleys of the Santa Clara and the Ojai, it cannot fail, at no distant day, to be a place of considerable importance. The valley of the Santa Clara river contains the richest and best agricultural land in the county. Here, as almost everywhere in southern California, the only want is water, and this want has been in part supplied by arrangements for artificial irrigation. The soil of the valley is a rich, sandy loam, and is said to require less moisture to perfect vegetation than many other varieties. Wheat and barley have been successfully cultivated, and the experiment, on a small scale, of raising sea-island cotton tried with success. The sugar-beet grows to a size that is quite enormous, some having reached the gigantic proportions of thirty or forty inches in circumference.

A gentleman, whose official duty rendered it necessary for him to make a careful examination of this lower Santa Clara valley, says: "My impression is, that this valley offers greater inducements to settlers from the east than any other in California. Lands are cheaper, society is growing up, schools are being established, the climate is excellent and well adapted to almost every variety of production. The valley is inclosed by ranges of mountains on both its north and south sides, which protect it from the cold storms and high winds, but being open to the ocean toward the west it has the advantage of the sea-breezes more than almost any other in California."

A ride up this beautiful Santa Clara valley, early in the month of March, was full of interest to the writer, and may in part account for the readiness with which competent testimony in regard to its desirableness is accepted. "Seeing is believing," and when one knows in part, evidence in regard to the rest which falls in with the knowledge possessed is easily credited.

A good team, a comfortable carriage, and pleasant company, are elements that make up about as desirable a whole as the imperfect conditions of this world can furnish. But when to these are added the brightest of bright sunshine, the purest and most exhilarating of atmospheres, and a temperature at the exact point of comfort, with mountains and valleys and cultivated fields and orchards in blossom to give beauty and variety to the scenery, it would be a very churlish soul indeed that could not find delight and satisfaction in such a combination. But it was not a churlish soul whose experiences on that day are to be narrated, but one determined to extract sweet

out of everything that had in it one particle of sweetness. What wonder then that the happiness of that day had a very unusual completeness!

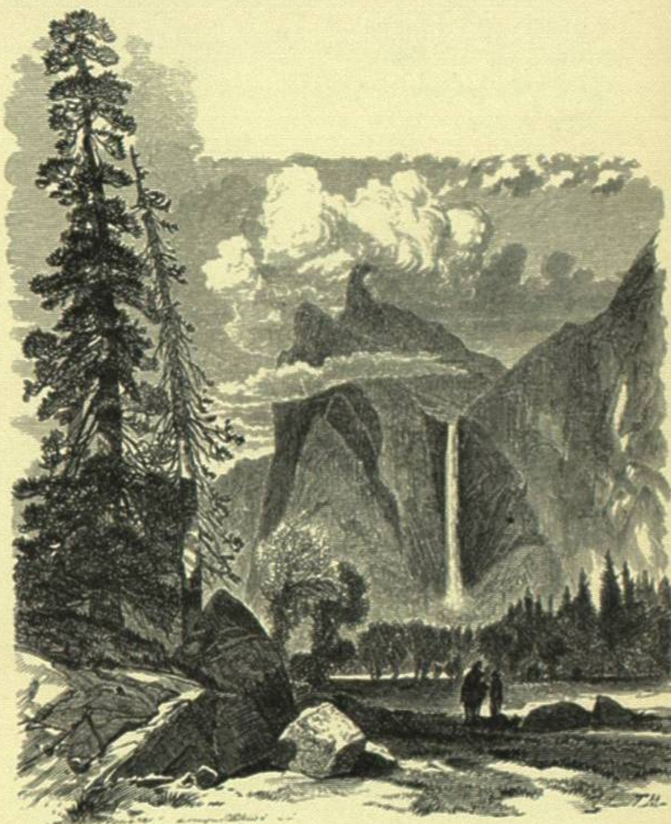
In going up the valley we passed through the oil regions that help to make this locality famous. Instead of occurring in depressions and valleys, as in the eastern States, where it requires pumps to bring it to the surface, the oil here oozes out from the cracks and crevices in the mountains, wherever there is a tilt in the dip or a fracture or an angle. I do not speak after scientific methods, but as things looked to common, every-day eyes. Wherever the oil finds a crack out of which it can creep it improves the opportunity. After going up the Santa Clara valley some twenty or twenty-five miles, we crossed over the mountains which divide it from the San Buenaventura valley, through the Santa Paula pass, and on our return passed through the Ojai valley, and back to the town by the side of the San Buenaventura river.

One of the curious sights that we witnessed during the ride was a stream of oil which ran out of a crevice in the mountain and fell into a creek which was on its way to the San Buenaventura river. The rivulet, where we observed it, was twenty or thirty feet wide, and in its center there was a stripe of oil six or eight feet wide, which, grimy black and unctious, kept on its winding course, carried by the current hither and thither, as the stream turned and twisted and curved in its onward passage. It looked like an immense serpent, with a capacity for swallowing any impediment that came in its way. It was an uncanny sight to the eye of taste, and an uncomfortable one to the eye that looked at things with a

regard to their pecuniary value; for what a waste it was to have this oil running away and losing itself when it ought to be creating values by being headed up in barrels and afterwards refined!

The *maestro* of our company was at that time the principal operator in oils in that region. The business, just then, was in rather a depressed condition. It had been found that, easily as the oil was obtained, it could not be refined and put into the market at a price to compete with eastern oils. But very shortly after the date of our ride there was quite a revival in the trade occasioned by the successful results of experiments in San Francisco, whereby it was found that gas could be made from the crude oil at much lower rates than it could be from coal. It therefore happened that the snaky stream of oil was soon arrested, barreled and sent to San Francisco, to be turned into bright and shining lights.

The pleasant town of Santa Barbara is thirty miles northwest from San Buenaventura. The road connecting the two places is singularly romantic and delightful. For nearly half the way it lies directly on the beach, and the horses trot along with the ocean surges bathing their feet. When the tide is in, or coming in, persons traveling with animals not used to the wash and roar of the waters are sometimes obliged to stop by the way and wait for hours till the tide goes out. The ride between these two places is memorable to the writer, not only for its picturesqueness and the beautiful ocean views, but also as affording the first opportunity of seeing a whale. What a monster it was! An *immensa molis* as truly as the famous wooden horse of the Greeks. Wounded by a har-



BRIDAL VEIL FALL. Page 219.

poon, but escaping its pursuers, it had died in the ocean and been stranded here, thrown on the beach by the waves that had not power to take it away again. There lay the huge carcass, with the oil, set free by the hot sun, oozing out in every direction. It was eighty feet long—twice the length of a good-sized house—and so high, as it lay prone on the sand, that standing near the side I could not see over it. Like the curious Trojans examining the votive offering of the Greeks, I walked round and round it. It seemed impossible that one single life could have animated so immense a mass of matter. Figures or statements of measurement give no adequate idea of its immensity. I could readily believe that not one man only, but a whole family, might easily find accommodations in its interior apartments, provided they would take the risk of furnishing their own means of respiration.

The end of this pleasant drive was Santa Barbara. It is only within a few years that this town and the region around have excited the attention which they well deserve. While mining interests were dominant the attention of emigrants was centered in those parts of the State where such interests were best advanced. But in the time back of American occupation it was not so. The Aborigines showed their appreciation of natural advantages, and their adhesion to those conditions which guaranteed a healthful, joyous life, by congregating in this pleasant region. When Cabrillo examined the country along the coast, only fifty years after Columbus discovered America, he found no part of it so thickly populated as this. He spent six months in what is now Santa Barbara county, and has left upon record the names of forty towns and villages