mission of San Buenaventura, in 1792, latitude 34° 16', apples, pears, plums, figs, oranges, grapes, peaches, and pomegranates, growing together with the plantain, banana, cocoanut, sugar-cane, and indigo, all yielding fruit in abundance and of excellent quality. Humboldt mentions the olive oil of California as equal to that of Andalusia, and the wine like that of the Canary Islands At present, but little remains of the high and various cultivation which had been attained at the missions. Under the mild and paternal administration of the "*Fathers*," the docile character of the Indians was made available for labor, and thousands were employed in the fields, the orchards, and the vineyards. At present, but little of this former cultivation is seen. The fertile valleys are overgrown with wild mustard; vineyards and olive orchards, decayed and neglected, are among the remaining vestiges; only in some places do we see the evidences of what the country is capable. At San Buenaventura we found the olive trees, in January, bending under the weight of neglected fruit; and the mission of San Luis Obispo (latitude 35°) is still distinguished for the excellence of its olives, considered finer and larger than those of the Mediterranean.

The productions of the south differ from those of the north and of the middle. Grapes, olives, Indian corn, have been its staples, with many assimilated fruits and grains. Tobacco has been recently introduced and the uniform summer heat which follows the wet season, and is uninterrupted by rain, would make the southern country well adapted to cotton. Wheat is the first product of the north, where it always constituted the principal cultivation of the missions. This promises to be the grain growing region of California. The moisture of the coast seems particularly suited to the potato and to the vegetables common to the United States, which grow to an extraordinary size.

Perhaps few parts of the world can produce in such perfection so great a variety of fruits and grains as the large and various region inclosing the bay of San Francisco, and drained by its waters. A view of the map will show that region and its great extent, comprehending the entire valleys of the Sacramento and San Joaquin, and the whole western slope of the Sierra Nevada. General phrases fail to give precise ideas, and I have recourse to the notes in my journal to show its climate and productions by the test of the thermometer and the state of the vegetable kingdom.

VALLEYS OF THE SACRAMENTO AND SAN JOAQUIN.

These valleys are one, discriminated only by the names of the rivers which traverse it. It is a single valley—a single geographical formation—near 500 miles long, lying at the western base of the Sierra Nevada, and between it and the coast range of mountains, and stretching across the head of the bay of San Francisco, with which a *delta* of twenty-five miles connects it. The two rivers, San Joaquin and Sacramento, rise at opposite ends of this long valley, receive numerous streams, many of them bold rivers, from the Sierra Nevada, become themselves navigable rivers, flow toward each other, meet half way, and enter the bay of San Francisco together, in the region of tide water, making a continuous water line from one end to the other.

The valley of the San Joaquin is about 300 miles long and 60 broad, between the slopes of the coast mountain and the Sierra Nevada, with a general elevation of only a few hundred feet above the level of the sea. It presents a variety of soil, from dry and unproductive to well watered and luxuriantly fertile. The eastern (which is the fertile) side of the valley is intersected with numerous streams, forming large and very beautiful bottoms of fertile land, wooded principally with white oaks (*quercus longiglanda*, Torr. and Frem.) in open groves of handsome trees, often five or six feet in diameter, and sixty to eighty feet high. Only the larger streams, which are fifty to one hundred and fifty yards wide, and drain the upper parts of the mountains, pass entirely across the valley, forming the *Tularé* lakes and the San Joaquin river, which, in the rainy season, make a continuous stream from the head of the valley to the bay. The *foot hills* of the Sierra Nevada, which limit the valley, make a woodland country, diversified with undulating grounds and pretty valleys, and watered with numerous small streams, which reach only a few miles beyond the hills, the springs which supply them not being copious enough to carry them across the plains. These afford many advantageous spots for farms, making sometimes large bottoms of rich moist land. The rolling surface of the hills presents sunny exposures, sheltered from the winds, and having a highly favorable climate and suitable soil, are considered to be well adapted to the cultivation of the grape, and will probably become the principal vine growing region of California. The uplands bordering the valleys of the large streams are usually wooded with evergreen oaks, and the intervening plains are timbered with groves or belts of evergreen and white oaks among prairie and open land. The surface of the valley consists of level plains along the Tularé lakes and San Joaquin river, changing into undulating and rolling ground nearer the foot hills of the mountains.