

in the pure atmosphere of California. Neither are the storms of hail, rain and wind, with their thunder and lightning accompaniments, bringing destruction to property and death to people in the East, repeated on the Pacific Coast. Sunstroke, hydrophobia and thunder and lightning are here almost unknown.

Upon the lofty summits of the mountains and in the elevated valleys is found another climate, where winters are quite severe, the snow falling and ice forming. The mountain ridges are cold at night throughout the summer, and the valleys pleasantly cool, their climate resembling that of the Atlantic Coast of the same latitude.

RESOURCES.

California constitutes an empire by itself. Her territory extends over ten degrees of latitude, and includes valleys by the sea and mountains reaching to the eternal snows. Over her immense area a kindly nature has bestowed every physical feature desirable by man, and a climate varying only by altitudes. Within this we find every resource of honor, pleasure and wealth. To call attention to all, or describe them, would fill a cumbersome volume. The great area of the State, much of which is but slightly explored, offers many difficulties for a thorough examination, and naturally invites speculation. We expect our State to become great and wealthy, with a population of teeming millions, drawing from the soil the treasures Nature has stored for their use, adapting every means that is furnished to add to their comfort and convenience, and sending forth a thousand arms of commerce to every quarter of the globe. Believing in the exhaustless native wealth of California, it is a pleasure to discuss the theme. The natural resources of a country consist in its soil, its mines, its forests and its fisheries, and the industrial resources in capabilities for manufactures and adaptability to commerce. The first form the basis of the latter as well as of all wealth. The savage subsists from the spontaneous growths of the soil, and as man advances in civilization so do the productions of agriculture. The farmer supplies the manufacturer, who prepares food and clothing. These alone support society and maintain a commerce in its earliest stages. A further advanced state of enlightenment seeks below the surface of the earth, and mines are developed. These are the most important of the resources of a country, and from them a nation rises to wealth and power. The soil and the mines of England have made her the richest country of the earth, and enabled her to become the most extensive manufacturing and commercial nation of the world. Let us examine into the resources of California, and see if she possesses the elements to support a large population and enable her to rise to future greatness.

AGRICULTURE.

The culture of the soil in California was not until recently regarded as an important resource. The golden grains from the placers and veins of the Sierra, gave the only incentive to industry, while the broad valleys, scrod and sun-cracked by the heats and droughts of summer, were dreaded as inhospitable and irremediable deserts. American farmers were accustomed to the frequent showers and verdant fields of summer, and the belief was entertained that summer rains were indispensable. Gradually the prejudice has been overcome, and now the golden grains from the fields exceed in value those from the mines. The future is very bright, and production is without range or limit. The extent of arable soil is immense, and the geniality of the climate fosters all vegetable and animal life. Estimates by enthusiasts, once thought extravagant, are proving within bounds as development follows experiment. The soil is generally deep and lasting, and if supplied with water responds to every demand. Neither is the productive soil confined to the valleys and plains, for wherever the climate permits, and water is afforded, roots, fruits or cereals grow luxuriously. The rank tule succumbs to the wheatfield, and the repulsive chaparral gives way to the vineyard. Cotton and tobacco know no north nor south, and recent trials show that both are here grown and cured in greater perfection than elsewhere in the United States. Tropical fruits grow in luxuriant side by side with the hardy apple of the north, and the camel of the African desert grazes and brings forth its young in the same field with the cashmere goat, from the heights of Himmalaya. Within the range are nearly all plants and all useful animals. The fruits have grown to such perfection that the fame of the State has become world-wide, and so favorable is it for the rearing of stock that animals brought to it from other countries here add new developments and come to greater perfection. The diseases to which horses, cattle, sheep, dogs and other animals are subject in other countries are almost unknown on the Pacific Coast.

The agricultural field we have shown to comprise an area of 36,000 square miles, or 23,040,000 acres of arable land, and a grazing range of 41,500 square miles, or 26,560,000 acres, or a total of 49,600,000 acres; and this is to be largely increased by the subjection of the forests and the reclamation of the desert. The grazing lands, where capable of being irrigated, are generally susceptible of cultivation, and under such conditions the total area should be described as arable.

Fifty million acres of tillable and grazing land is less than the usual estimate, but the twenty-five million comprised in the southeastern section of the State, from the dividing ridge of the Sierra to the Colorado, we have classed as desert, which has been generally ranked as fitted for some purposes of culture or pasture. Small areas may be rendered fertile, and beds of marl and salt, and veins of lead, gold, silver and copper are known to exist; but the barrenness is so general that to class its many millions of acres as agricultural or grazing, would be but a deceptive array of figures.

The swamp and overflowed lands have attracted increased attention in the last few years. Such lands as require protection from overflow to be successfully cultivated, were granted the State by the General Government. The area of these is not well defined, but is estimated at from three to five thousand square miles. The most important sections are within the deltas of the great rivers, and are beds of peat, formed by the deposit of silt and the growth of rank vegetation. Such a soil is of incomparable fertility and inexhaustible resource. They are reclaimed by the construction of embankments, or levees, to prevent overflows, and when thus protected, two, and sometimes three crops of grain are grown annually, yielding often sixty bushels of wheat to the acre. A field of eleven acres, on Sherman Island, in 1874, yielded 90 bushels per acre. Fruit and forest trees grow as well, and with the warm climate and moist soil there can be no limit to the range of production. The trade winds entering by the Golden Gate sweep gently over the delta during the summer, tempering the climate most pleasantly. When this broad sea of waving tule is fully reclaimed to cultivation in the products best adapted to the soil, it will pour forth a wealth unprecedented in agriculture, and furnish pleasant homes for as dense a population as crowd the rich lands of Holland or Belgium. Ex-Surveyor-General Bost estimates the total area of the swamp and overflowed land belonging to the State, at three million acres, every acre of which would produce fifty bushels of wheat at each cropping, or other products in proportion.

These, as well as other arable and grazing lands of California, are generally owned in large tracts. Anterior to the acquisition of the country by the United States, large grants to individuals had been made, aggregating some six million acres, in bodies of from three to forty square leagues in extent, covering the most choice sections of valley and grazing lands near the coast. Subsequently, large purchases have been made of Government land, several persons owning over two hundred thousand acres each, and the Assessor's reports show one hundred and twenty-two farms exceeding twenty thousand acres each, one hundred and fifty-eight exceeding ten thousand acres, and generally showing that large farms is the rule. Nevertheless, there are still large areas unoccupied, much being desirable land. The prices of land so vary, according to location, soil and character of title, that no satisfactory report can be given. In some localities, it is obtained at the Government rate of \$1.25 an acre, from some of the large Mexican grants at even