

CHAP. III.

TOPOGRAPHY OF UPPER CALIFORNIA.—NATURAL PRODUCTIONS.

THE part of Upper California at present occupied by the missions and settlers, is about five hundred English miles in length, and the breadth from the sea to the first range of hills may be stated at an average of forty miles, which will give an area of twenty thousand square miles and about thirteen millions of English statute acres. This however is but a small part of Upper California, as the whole country extending to the Rio Colorado, and to an undefined limit northward, is included in its territory; and although the missionaries have hardly extended their settlements to the northward of the bay of San Francisco, yet the most fertile lands and those fittest for European settlers, lie to the north of and around that bay. The whole extent of Upper California properly so called presents a superficies equal to many of the most extensive and powerful kingdoms of Europe.

All this immense extent of territory, except that occupied by the missions on the coast, is possessed

by scattered tribes of Indians, and has been hitherto but little known. Since, however, the Mexican country has been opened to strangers by the revolution, those plains and wilds have been traversed by adventurers from the United States of North America: parties of hunters armed with rifles and carrying a few articles for barter have travelled from the borders of the Mississippi to the shores of the Pacific, and have astonished the Californians by their sudden appearance, and still more by the fact that they had escaped the vengeance of the wild Indians. The adventures of those American hunters furnish examples of the most extraordinary daring, and present a remarkable contrast to the conduct of the indolent native creole. The latter seldom leaves his own habitation or exposes himself to the rays of the sun; whereas these men, from their being always in the open air, and from the effect of their rough pursuits, appear nearly as wild as the beasts they are in chase of. The Spanish settlers always considered the Indians on the Rio Colorado and countries adjacent, as ferociously inimical to white men, and that it was almost impossible to pass through their territory. This is, however, a great exaggeration; for although some of the tribes may not be so docile or pusillanimous as those formerly living on the shores of the Pacific and in other parts of Mexico, yet there are none of them very formidable.

The country immediately behind the high lands which bound the present possessions of the missionaries, is reckoned even superior to that on the coast, and is said to consist of plains, lakes, and hills, beautifully diversified, and of the greatest natural fertility, capable of yielding every variety of vegetable productions, and abounding with timber of great size. To the northward of these plains, are situated two large lakes said to be distant from one another about eighteen or twenty leagues, and their extent is described to be very great; but so little certain is known respecting them, that it would only lead to error to repeat the tales related by those who have never seen them; there is no doubt however of their existence, and that they possess many fine islands which are inhabited by Indians. The lakes and streams in this district abound with bulrushes called by the natives *Tulé*, and from this the whole country takes its name, being called the plains of the *Tulares*.

As bearing on the topographical character of the Indian countries, I will here introduce a short notice of some missionary travels through a part of them, undertaken shortly after the first establishment of the missions in Upper California. The information is interesting from the earliness and authenticity of its source, and not the less so because it throws some little light on the character of

the natives and the policy of the original founders of the Californian missions. For this and other valuable information on the subject of the present work, derived from some scarce books and old manuscripts, I am indebted to the great kindness of Don Manuel Najera, prior of the Carmelite convent in Guadalaxara, in the republic of Mexico, a gentleman as distinguished for his extensive learning as his excellent moral qualities. Don Manuel has in his library a collection of valuable and scarce books and MSS on the subjects of Mexican history and antiquities; and it is to be hoped that he will one day, give to the public the result of his extensive researches.

The first of these curious documents is a manuscript written by friar Francisco Garzes, giving an account, in the form of a journal, of a journey performed by him in the year 1775, from the missions on the borders of Sonora to Upper California and his return by nearly the same route. This journey was made about six years after the establishment of the Franciscan missions in Upper California. The Father Garzes naturally expected to be received by his brethren and the military authorities in the new settlements, with kindness, and admitted as a coadjutor in the work of civilizing the natives, and in establishing the true faith amongst them; more particularly as having verified by his successful journey, the facility of communicating by land with

Mexico, and of connecting in one bond, the whole territory from the Rio Colorado to the Pacific. But very different was his reception. On his arrival at the mission of San Gabriel, he was told that it was not at all desirable that a communication should be opened by which the Indians on the Rio Colorado and the intervening plains might be enabled perhaps to molest or attack the new settlements. So much displeasure did the governor of California shew to the traveller, that he refused him all succour or assistance, and even denied him the necessary provisions to enable him to return. Finding such an inhospitable reception Father Garzes remained only a few days with his brother missionaries, and set out on his return, traversing the country called the Tulares and finally arriving at his own mission in Sonora without any accident.

There is a short manuscript annexed to that of the Father Garzes, professing to be the journal of Father Francisco Atanacio Dominguez, and Father Silvestre Velez de Escalante, kept during a journey performed by them in 1776, from Santa Fé the capital of the province of New Mexico towards Monterey in Upper California. Those friars took a more northerly route than Garzes, and were by their account at one time as far as 41° N. But after they had arrived as far as what they considered to be 136 leagues in a direct line west of Santa Fé, and reckoning themselves yet a great

distance from Monterey, they determined to give up the enterprize and to return.

From the accounts given by these missionaries, it appears that the borders of the Rivers Gila and Colorado were thickly peopled by Indians in a very low state of civilization. They, however, cultivated some maize and even wheat, and they had also cattle. The travellers did not encounter the slightest opposition or hostility from any of the tribes through which they passed; on the contrary, they were received with kindness and presented with a part of such food as they possessed. On leaving the vicinity of the Rio Colorado and proceeding westerly, they found the natives fewer in numbers and less civilized, the greater part being entirely naked and living on roots and seeds of trees.

Father Garzes says that his manuscript will be accompanied by a map made by Father Pedro Font, who accompanied him a part of the journey, but who separated from him and returned. This map, however, is missing; and although Garzes informs us that he carried with him a quadrant and mariner's compass, it is difficult to trace his route, as he only gives the latitude at very distant points; but he gives the number of leagues daily travelled, and the point of the compass towards which he directed his course.

The Journeys of those Friars are chiefly valuable,

in as far as they prove that there is nothing in the character of the Indian population of the country lying between the peopled Mexican states and California which can prevent its being easily colonized, or which could prevent a free communication over land; neither is the distance at all formidable. It is also proved by them that the whole of this vast country is free from any natural obstruction to its settlement and cultivation. There are no impenetrable forests, and the greater part is a level country, full of pasturage and capable of being cultivated.

The Father Garzes travelled between the thirty-fourth and thirty-fifth degrees of latitude, having taken his departure from the west bank of the Rio Colorado in about 35° N., keeping in the direction of the mission of San Gabriel in Upper California, making the distance by his diary from this river and the said mission only about ninety leagues, which agrees very well with the distance as laid down upon the maps. He makes the distance from the last of the missionary settlements in Sonora, called "Tucson," to the Rio Colorado, seventy-five leagues—thus making the whole distance from those settlements to San Gabriel on the Pacific, 165 leagues. This distance, by the usual mode of travelling in Mexico, would only be about ten days' journey. As these travellers, however, take no observations for the longitude, for which they had not the necessary

instruments, there is no great certainty as to the distances they give. They calculate the leagues by the rate at which their mules travel; and as the maps we have are formed by this mode of surveying, they cannot be much depended upon.

These missionary travels being undertaken chiefly with the intention of converting the natives and of fixing on the proper places for planting missions, every thing which is most interesting to the general reader or geographer is almost lost sight of. The Father Garzes travelled with the Virgin Mary painted on one side of a piece of canvas, and the Devil in the flames of hell on the other. To unfurl this standard was his first operation on arriving at the habitation of a tribe of Indians; and he observes, that on shewing the Virgin they generally exclaimed, "Good!" but on turning the other side, they said, "Bad!" This introduction was followed by some questions, put through interpreters, respecting their willingness to become christians, and vassals of the king of Spain; whether they knew any thing of Heaven, of God, or of the Virgin, &c. The Father, however, took some pains to ascertain the names of the different tribes on the rivers Gila and Colorado, and of their wars and numbers. He gives the following list of the nations he visited or had an account of: viz.

ON THE RIVER GILA.		ON THE RIVER COLORADO.	
Nations.	Souls.	Nations.	Souls.
Papaga,	4,000	Cucopa,	3,000
Pima,	2,500	Talignamay, ..	2,000
Cocomaricopas, ..	2,500	Carjuenché, ..	3,000
		Yuma,	3,000
		Talchedon,	2,500
		Tamasabs,	3,000
	9,000		16,500
Total,		25,500	

He gives the names of eleven other nations which inhabit the country more to the northward, but does not state their numbers. This numeration is exclusive of all the tribes in the intervening country from the vicinity of the Rio Colorado to the Pacific ocean; and although the tribes which he saw there do not appear to have been so numerous as those on the rivers, yet they were very considerable. The Fathers Domenguez and Escalante found to the northward, as far as they reached, the whole country occupied by tribes, which appear to have been more civilized and better clothed than those on the rivers and plains to the southward, so that the aggregate population of these, as yet unknown countries must be great.

Since these journeys which seem to have been undertaken by the missionaries with some zeal, there has been nothing done either to ascertain the real state or situation of those countries, or to civi-

lize the natives. The whole country beyond the mission of Tucson is, as in former days, in the possession of the Indian tribes, and the vast region between the frontiers of Sonora and the strips of country occupied by the descendants of the Spaniards in Upper California is a *terra incognita*, and not merely so, but, apparently, utterly forgotten by the inhabitants and government of Mexico.

The lakes of the Indian country abound with a great variety of fish and aquatic birds, and have on their borders and islands great numbers of otters and other animals which supply valuable furs. The Spanish missionaries had long ago an intention to form new missions in the plains of the Tulares, but this was never accomplished; and the revolution has probably put an end to all such projects for a long time.

The situation of Upper California, between the tropical and northern zones, places it in the list of those countries which have always been most prized by mankind; and the nature of its soil and climate and most of its other topographical relations, are calculated to justify all the favourable expectations which its happy geographical relations naturally give rise to. "The climate (says Pérouse) differs a little from that of the southern provinces of France; at least the cold is never so piercing there, but the heat of summer is much more moderate, owing to

the continual fogs which reign there, and which procure for the land, a humidity very favourable to vegetation."

This account of Pérouse is not quite correct. The southern parts of the country are not entirely exempt from the periodical rains and long droughts to which the tropical climates in their vicinity are liable. For this reason irrigation of the land sown with wheat becomes necessary there. In the northern districts, however, and particularly around the bay of San Francisco, the rains are more general and irrigation unnecessary. The periodical rains of the south, which are very heavy, begin to fall in November and continue till April; being the reverse of what takes place on the Mexican continent, where the rains commence in June and end in November. From Monterey northward, a thick fog commences on the cessation of the rains, and continues till the month of August. During this period the fog prevails almost daily in the morning; but during the rest of the year, the sky is beautifully clear and serene.

The degree of temperature in a country extending through so many degrees of latitude, and possessing such a variety of surface, must vary much in different places. I regret that I possess no accurate data to fix this. In the month of December (1826) it is stated by Capt. Beechey that the mean tempera-

ture of San Francisco was $53^{\circ} 2'$ the maximum 66° and the minimum 46° ; and the hygrometer is said to have indicated a dry atmosphere.

The surface of the country is considerably varied in different districts, being in some places elevated into ranges of low hills, in others spreading out into extensive plains. The hills vary from one thousand to upwards of three thousand feet in height. Some seem chiefly composed of sandstone. The soil is in some places of a light sandy character, yet far from sterile; in others, of the richest loam. In some spots the surface is marshy; but the prevailing character of the soil is dryness. Indeed, the chief defect of the country is the infrequency of springs and rivers; although this infrequency is far from amounting to a serious obstacle to agriculture or even to extreme fertility. Water can be obtained in most places by digging, and the plains between the mountains and the shore are here and there intersected by small streams, on the banks of which most of the missions are founded. The largest rivers are those which run into the bay of San Francisco and arise from the north, the north-east and the south-east. The largest of these, the Sacramento, has been traced some hundred miles upwards to the north-east where it was found still a large river; it is supposed by some to flow out of a large lake, but this point remains yet unascertained:

it is navigable, at least by boats, to a great distance inland. The San Joachin, also of considerable size, rises in the distant mountains in the south-east.

The Jesus Maria empties itself into the Sacramento, at some distance from its mouth; it is also navigable by boats to a considerable distance. It flows from the south and east, through a country said to be of great fertility and susceptible of irrigation by it. The other rivers are much smaller, and indeed most of them are only rivulets: most of them water different missions, and derive their names from them. They are, Rio del Ranchio (which flows into the bay of Monterey); El Pajero; San Carlos; Santa Clara; San Gabriel; Santa Anna; Los Angeles; San Juan Capistrano; Santa Cruz; Santa Ynes; San Buenaventura.

California possesses several harbours, and one, at least, of great excellence.

SAN FRANCISCO is not only the principal port in California, but the largest and safest on the whole western coast of America. It is an arm of the sea or bay which runs a considerable distance inland, and is accessible by a narrow but deep and safe entrance; it divides itself inside into various wide branches, so as to make it one of the most capacious harbours in the world.

MONTEREY is only an open bay or roadstead, but is safe from almost all winds. This station