

on the way are Ōnābās (on the Southern bank of the river Yaqui,) and Los Ālāmōs, a celebrated mining district, situated between the rivers Mayo and El Fuerte, in a barren plain, where supplies, even of the necessaries of life, are drawn from the valleys of Oposura and Sonora in the upper part of the State.

The mines of Alamos lie nearly five leagues to the North of the town. They resemble those of Catorce in the character of the veins, which are mostly from six to eight varas in breadth, and produce ores varying from fourteen to thirty marcs of silver to the monton. The principal mining proprietors are four brothers of the family of Almādōs, who are said to possess a capital of half a million of dollars each: but the merchants are numerous and wealthy, and the town itself, which took its origin from the mines, is built with considerable magnificence. It contains six thousand inhabitants, and from three to four thousand more are employed daily in the mines.

To the North-east of Alamos, and nearly due West of Jesus Maria, upon the slope of the Sierra Madre, towards the Gulf, lies the "Mineral" of San José de Mūlātōs, discovered in the year 1806, and registered as a "Placer de Oro," on account of the quantity of gold found in the small stream which descends from Mūlātōs to the river below. On investigating the ravine, from which this stream issued, three elevated crests were discovered, (one of them more than one hundred varas in height,)

intersected in all directions by small threads, or veins, of white earth, containing gold in so large a proportion that the ore of inferior quality was disposed of at twelve and fifteen dollars the arroba, while the richest sold for two hundred dollars.

Two of the crests have been extensively worked, but the third is nearly virgin. All three may be explored to advantage by commencing at the summit, and sinking through the crest to the level of the ground, as the veins of gold traverse every part of the rock. The gold of Mulatos is nearly pure, the lowest quality being twenty-three "quilates," while it sometimes rises to twenty-three quilates, three and a half grains.* Some idea may be formed of the abandoned state of the district from the facts related by Mr. Glennie, to whom I am indebted for the above account, and who says, that when he visited Mulatos, he found a number of Indians suspended by ropes upon the side of the rocks, or crests described above, picking out the earth in which the gold is contained with wooden stakes, but without attempting an excavation of any kind.

I much regret that Mr. Glennie's continual absences from Mexico should have prevented him from continuing the account of his visit to the Northern Mining Districts, of which I have made such frequent use in the preceding parts of this Section. He visited both Ālāmōs and Cōsālā, of which I shall have

* 4 grains=1 quilate; 24 quilates, pure gold.

occasion to speak subsequently; and it would have been a satisfaction both to the public and to myself to corroborate statements, many of which may be thought to require confirmation, by the evidence of so intelligent and indefatigable an observer. I must, however, remark generally, that Mr. Glennie's views, with regard to the riches of Sierra Madre, (which he terms *one mine* from Guarisamey to Jesus Maria,) coincide entirely with those entertained by Colonel Bourne; and that the opinions of both are confirmed by all the Mexicans who have visited the Internal Provinces; by the official documents, frequently alluded to in the foregoing Books; and by the unanimous evidence of a number of most respectable individuals, whom I had an opportunity of consulting, myself, upon the subject at Durango and elsewhere.

To the North and North-west of Alamos, between the rivers Yaqui and Mayo, there are vast plains inhabited by numerous tribes of Indians; who, like the Opatas of Babiadora, have become reconciled to the restraints of civilized life. The Yaqui tribe possesses a number of towns on the Southern bank of the river of that name, each surrounded by fields and gardens in the highest state of cultivation; and South of the river Mayo, the Mayos alone form a population of 60,000 souls. Their capital, Santa Cruz, contains 10,000 inhabitants. Both the Yaquis and Mayos are docile and industrious, and supply the mining districts and farms with labourers,

and the towns with artisans, many of whom are by no means unskilful in their respective trades.

To the South of Alamos, in the direction of El Fuerte, there is little or no population; but the country is level, and the road practicable for carriages: the distance is twenty-four leagues.

El Fuerte was originally a military station, established by the Spaniards in their progress towards the North. Since the union of Sonora with Cinaloa, it has been selected as the residence of the Governor of the State, the Congress, and the Supreme Tribunal of Justice; and it now contains four thousand inhabitants. The situation is not particularly favourable; as, notwithstanding the vicinity of the river, the country about the town is unproductive, and the heat in summer insupportable. The *Tierra Caliente* of Cinaloa extends from El Fuerte, or rather from Alamos, to the confines of Guadalajara; it is one vast sandy plain, destitute of vegetation, except in the rainy season, or in spots where the vicinity of the mountains, or the confluence of two large streams, ensure a constant supply of water. This is the case at Cūlīcān, the most ancient and populous town in Cinaloa, situated upon a river of the same name, eighty leagues South of El Fuerte. It contains eleven thousand inhabitants; and the country about it is well watered and highly productive.

Cōsālā, thirty-five leagues South of Culiacan, is the next town of any note on the road towards Jä-

liscö. It derives its importance entirely from its mines, one of which, called Nuestra Señora de Guadalupe, is very celebrated. It belongs to Don Francisco Iriarte, a relation of the President's, who refused an offer of one million of dollars, made in 1825, by an association of Foreigners, on condition that he should allow them to work his mine for a term of three years. Guädälüpě is free from water, and situated at a considerable elevation above the plain; it contains a vein of gold of considerable breadth, and its produce might be increased to ten times its present amount; but the proprietor, a man of very peculiar habits, often refuses to work the mine for months together, and when compelled to employ labourers upon it, in order to prevent the loss of his title by exposing the mine to a denunciation from some other quarter, never allows more than four arrobas of gold (100lbs weight) to be raised in the week.

The idea of a man possessed of boundless wealth, but refusing to make any use of the treasures within his reach, will seem incredible in Europe; but Iriarte really does not know the value of money. With at least a million of dollars in gold and silver in his house, he lives in a habitation, the furniture of which is composed of buffaloe skins, with wooden tables, and chairs of so massive a construction that it requires two or three men to lift them from one part of the room to the other. His sons, whom he never permits to leave the town, are forced to attend to a little retail shop in Cösälä; and his daughter, who

is pretty, is suffered to grow up in uneducated idleness. His own habits are abstemious; and his religious notions extremely strict. He dislikes allusions to his wealth, and considers any enquiry respecting his mine almost as a personal offence. To all proposals for a cession of the right of working it, even for a limited time, he has constantly given the same answer, namely, that he does not want money, and that if he did, those who offer him the most liberal terms know best that he could take out of his mine double the amount of any thing that they could give, in less time than they would themselves require to raise the money.

Under these circumstances but little is to be expected from the mine of Guadalupe until the death of its eccentric proprietor; but if any faith can be reposed in the uniform opinions of those best acquainted with Cösälä, its wealth is almost unparalleled; and the three sons of Iriarte must, at some future period, astonish the world by the immensity of their resources.

Cösälä and Öposürä are almost the two only spots in Mexico, in which the inhabitants are afflicted with wens, a disease so common in the mountainous districts of Columbia that the possibility of discovering a remedy for it has frequently occupied the attention of the Legislature. In both places it is attributed to some peculiarity in the water, which descends from the Sierra Madre strongly impregnated with mineral substances. It is singular how-

ever that similar effects should not be produced by it in situations which differ apparently but little from those designated as the seats of the disorder, for instance in the valley of Sōnōrā, nearly parallel with that of Ōpōsūrā, and in Cūliācān, which is almost on the same line with Cōsālā. Perhaps the effect diminishes as the distance from the Sierra increases; for Cōsālā is only five leagues from the foot of the Cordillera, and may consequently be more immediately under the influence of the causes calculated to engender the disease. This supposition is confirmed by the increased violence of the affection at Santa Ana, a rancho, where the ascent towards the Table-land commences, and where all the inhabitants without exception are victims to this disgusting complaint.

From Cōsālā to the Capital, or the Central States of the Republic, there are two routes; the one by Rosario, the river Cañas, and Guādālājārā, which is impassable during the rainy season, the other due-East from Cōsālā, across the Sierra Madre to Durango. By the first of these Colonel Bourne entered Cinaloa, and he quitted it by the second, the rains having commenced at Cūliācān on the 24th of June, and cut off all communication by the coast in the course of a very few days. He describes the ascent to the Table-land as full of difficulties, and extremely precipitous, but he nevertheless contrived to reach Durango in eight days by a road which crosses the mountains between Pāpāsquiāro and Gūarīsāmēy,

without passing through a single town, or Pueblo of any importance.

I have endeavoured to compress into this Section all the data now in my possession with respect to a part of Mexico, which, though least known, I am inclined to regard as the most interesting portion of the territories of the Republic. Its progress has been hitherto impeded by obstacles which no longer exist. Of its resources we possess only a very imperfect idea; but, should the details given in the preceding pages have the effect of attracting the attention of capitalists, and scientific men, I am convinced that a field will be opened to European enterprise superior in richness to any that the New World has yet presented.

In stating this I am far from wishing to encourage delusive hopes. Inquiry must precede speculation, or the errors will be repeated which have already proved so detrimental to the interests of the adventurers engaged in the mines of the Central States of New Spain. But the subject is of sufficient importance to merit attention; and attention, should it lead to ulterior projects, would, I am inclined to believe, be sufficient to ensure success.