water contained in it cannot be ascertained, as there is not any perpendicular shaft. There are ruins of fortifications about the mines, to defend the workmen from the Apaches. From the steepness of this hill, a socabon might be driven far below the bottom of the works from a fine plain. According to the accounts I received from two old men, called Padilla and Arbayo, the mine must have produced very rich ores. The vein is half a yard in breadth; but this must be understood (and the observation applies generally to all the mines in Sonora Alta), to mean that part of the vein which produces metals that can be reduced by smelting; for the natives, neither understanding the process of amalgamation, nor being able to procure quicksilver, have left untouched fine broad veins of azogues, or ordinary ores, in most of the mines, as may be proved by making experiments on the rejected ores, thrown out on the surface, some of which produce from twelve to thirty marcs per monton.

The mine of Cobriza de San Felipe, eight leagues north of Babiacora, and three leagues from the town of Ituapaca, with the Haciendas and farms of San Felipe, Agua Caliente, and Los Chinos, in its neighbourhood, is said to have been abandoned when producing pure silver, which the miners cut out in small pieces, by means of large scissors, or shears. It was the property of two women, named Loretas, but known in Sonora by the name of Guadalaxarenas. The Apache Indians made such repeated and desperate attacks on this district, that they were obliged to abandon the mine, during which time some water got in, and a considerable fall from the hill above choked up the mouth. However, a man, by the name of Vicente Estrada, succeeded, a few years since, in clearing away this rubbish, and gained the galleries; but before he could procure means of draining off the water, another huge rock fell in, and again choked up the mouth of the shaft. In 1826, another man was making a similar attempt, but in consequence of a formal denunciation of the mine being made by Padre Escobosa, he was obliged to suspend his operations.

The mine of San Antonio, on the hill of Tacapuchi, is three leagues from Babiacora, to the south-west. It is a new mine.

The metals produce at the rate of fourteen marcs per monton, of ten cargas, of three hundred pounds each.

Dolores, one league from Babiacora, produces silver in the same proportion, with a mixture of gold. With respect to population, provisions, wood, water, horses, mules, &c., these mines are very advantageously situated; the distance to Guaymas, by the nearest route, being only seventy leagues, and the road very good.

Eighteen leagues to the west of Babiacora is the town of Oposura, the capital of the Opata nation, and the residence of many of the principal inhabitants of this part of the State. It is a large town, containing upwards of four thousand inhabitants, and situated upon the southern extremity of a fine plain, on the banks of a river of the same name, which falls into the river Yaqui, above Onabas.

Oposura, though little known in Mexico, is one of the oldest establishments in the province, and the residence of many of the most respectable families, descendants of those who first settled in this State; amongst which, are the names of Morenos, Peralta, Mazo, Bustamante, Vasquez, Mallen, and Teran. As early as the beginning of the last century, the Jesuits had erected a famous convent and church there: the former is now in a ruinous state, but the church is entirely built of red brick and stone, decorated with many pictures of an image of the Virgin, which possesses diamonds, pearls, gold, silver, and precious stones, to a very considerable value. The square is very spacious, and surrounded by the houses of the principal families; besides which, there are several very good and regular streets, which render Oposura by far the prettiest and gayest town in the State.

The Whites are in greater proportion to the Indians than in any other place, and the Indians themselves seem in a more thriving condition, having better land, and more live stock. Below the town, for a considerable distance, the lands are divided amongst the inhabitants, and water from the river is carried through each lot by canals, so that here they can produce vegetables all the year round. Each family grows corn, wheat, frijoles, sugar, &c. for the annual provision: most of them

have horses, mules, and horned cattle, which breed and feed in the adjacent plains and mountains.

At certain seasons they collect the cattle, when each proprietor affixes his mark. It is by the number of cattle which a man possesses, that you estimate his wealth: very few have money, except the merchants. When they kill a bull, eight or ten families divide it, and so each kills in turn. When a merchant arrives with goods to offer, the people select what they want, and pay in mules, bullocks, horses, &c. In this way they manage almost all their affairs, without the necessity of money. I resided in Oposura nearly three months in the house of the Cura, it being a central point, from which I made various excursions, so that I had a good opportunity of gaining a thorough knowledge of the manners and customs of the natives. To enter into minutiæ, would require much time; I shall therefore confine myself to an outline. The men are a fine race, much superior to any in the Southern provinces of New Spain; they are very lively and industrious, and strangers to care. The women are generally well-grown, handsome, with good shapes and complexion: a great many have blue eyes and light hair, which is a proof that they are not of Moorish extraction. They pride themselves on not mixing their blood with the aborigines. The women are continually employed in domestic affairs, and are excellent wives and mothers. They make all the men's clothing, as well as their own shoes, which are of silk and stuff, and they are very celebrated for needlework of every description, ornamental as well as plain. Their embroidery is not excelled by any thing in Europe, if it is surpassed in China. Both sexes are passionately fond of dancing and cards, and the intercourse of society is constantly carried on in order to gratify these tastes.

About eight leagues to the north-west of Oposura, are the old and celebrated mines of San Juan Bautista, of Sonora, which was the seat of Government for this province long before Arispe was built. In fact, it was the main object of my journey from England in 1825, to visit this mineral. Ten days after our arrival in Oposura, the priest, Dr. Julian Moreno, informed us that he had ordered every thing to be prepared for

our journey to these long-forsaken mountains; that on the following day his servants, whom he had dispatched to the Hacienda for the purpose, would bring horses and mules for the whole party, and that he himself, with a number of the principal inhabitants, and the Alcalde at their head, would accompany us. Two of the Cura's sisters, and four other ladies, announced their determination to be of the party, and prepared provisions of every description for a week, besides plenty of wine and brandy.

On the 8th of March we set out, our party consisting of forty-five persons, including servants, cooks, &c. and we arrived at San Juan, preceded by a musician mounted on a mule, playing a guitar; for nothing can be done in Sonora without music. On the present occasion the ladies were interested in the question, as they wished to dance in the evenings. On our arrival, we found nothing remaining of a place once so famous, but the outer walls of the Church, one room of which was entire, while we soon made another tenable with bulls' hides and blankets, which we appropriated to the ladies. The greater part of the men slept in the open air. Here we remained four days, and completely investigated the whole of the surrounding mountains, returning every evening to the camp, where the women prepared every thing for our comfort.

The "mineral" of San Juan is a mountain of itself, encircled by others to the North, West, and South, of considerably greater elevation. It is three thousand yards in length, from East to West, and fifteen hundred yards in breadth, where the broadest; terminating at both ends in a point, and is entirely surrounded by a ravine, which discharges itself at the east end into a large open plain. This mountain, or hill, has an elevation of six or seven hundred feet where highest, at which part the principal vein, called Santa Ana, crosses from North to South. This is crossed by another vein, on the Northern slope of the mountain, which is called El Rosario. These two mines have been worked to a considerable extent, and have produced, according to existing documents and tradition, in which no one varies, immense wealth. They now contain a great deal of water, (at least fifty or sixty varas,) which would require new shafts and

whims to take it out. In this same hill there are twelve other distinct veins, some of which have been worked for the sake of those small threads of very rich silver which appear to have formed the centre of the vein; but the azogues, which are very abundant, and yield from twenty-four to ninety-six ounces of silver, for three hundred pounds of ore, (according to experiments made on the spot by an azoguero, whom we brought with us from Real del Monte,) are untouched. The ores, by smelting, have yielded one-half pure silver; and tradition says, when they were obliged to abandon Santa Ana from water coming in, they left off in a vein of pure silver, one-third of a yard in breadth. The above twelve veins vary from one yard to six in breadth, at the surface; the depths to which they have been worked, are as follow: *- Santa Ana, one hundred and forty varas; Rosario, sixty; Cata de la Agua, five; Guadalupe, four; Gazapa, twenty; Texedora, twenty; Santa Catarina, twenty; Arpa, twelve; Prieta, twelve; Bellotita, twelve; Coronilla, twelve; Fontana, ten.

Half a league to the north of Santa Ana is the mine of Descubridora, with a vein of azogues, fifteen varas in breadth. This mine is thirty varas deep, and the metals contain ninety-six ounces to three hundred pounds.

One league to the westward, is the mine called Bronzosa, with an immense vein, which may be traced at least one mile upon the surface. It has been considerably worked, but has water in it.

Two leagues farther west, is the mine called Cobriza, a new mine, twenty varas deep. These two last mines bear a high character.

On the fifth day we returned to Oposura, after a very fatiguing but interesting excursion.

The valley of Oposura, through which the river of the same name winds, is about twenty-six leagues in length, commencing at the foot of the mountains of Nacosari to the north, and terminating at the town of Tepache to the south. In some places

it is from three to four leagues in breadth, and in others not more than half a league. In this small space there are, besides Oposura, the towns of Tepache (population 1,000); Icori, 2,500; Cumpas, 1,000. The villages, or ranchos, of Moreno, 200; Barispe, 4,000; Jamaica, 200; Ojo de la Agua, 400; La Noria, 50; Tembabi, 300; and other settlements, 100. The population, including the town of Oposura, is not less than 10,600 souls, and the valley produces annually 20,600 fanegas of grain; 180,000lbs. of brown sugar in cakes; 105,000lbs. of soap; 2,000 horses; 350 mules; 150 asses, and 3,500 cows and bulls, besides sheep, &c.; 4,000 blankets; 900 dressed bulls' hides, with a good deal of cotton and tobacco.

To the north, is the mining district of Nacosari, sixteen leagues from Oposura, and fourteen eastward from Arispe, which is a town of 3,000 inhabitants, now the residence of the Commandant-General of the Estate, Colonel José Joaquin Calvo, and his staff. The entrance from the plain of Nacosari is up a very narrow glen, two leagues in length, down which there flows a tolerable stream of water, which is lost in the sand, about one mile from the entrance; but I was informed that, in the rainy season, it is a stream as far as Ojo de la Agua, the source of the river Oposura. Just before you arrive at Nacosari, the glen expands into a beautiful vale, planted over with fig-trees, pomegranates, peaches, and other fruits, with a variety of ornamental shrubs and plants, which were once arranged with order and taste, but now form a confused thicket. The remains of numerous canals are visible, through which water has been conveyed over every part of this vale; and the old men say their fathers used to speak of this spot (once the residence of a community of Jesuits), as being the most delightful place in all Mexico: it is certainly the most singular situation that I ever saw. At the upper end are the remains of a church, with mud walls, and several dwellings without roofs. There are the ruins, likewise, of some reduction works, but so dilapidated that it is impossible to judge of their former nature or extent, as they have been abandoned upwards of sixty years, and entirely destroyed by the Apaches. The mountains, which rise almost perpendicularly from this spot, are full of strata, of

^{*} Not one of them has a shaft, except Santa Ana, which is eighty-four yards deep to the water; below the water there is no shaft.

a great variety of colours; some of them present a mixture of bright red, yellow, green, and other varied tints. In traversing these mountains you meet with many excavations; but the principal mine, called San Pedro de Nacosari, is a phenomenon. The vein runs east and west, and is laid open from the surface more than one thousand varas, to the depth of seventy varas; the breadth of the aperture is about two yards, but on each side are immense quantities of rubbish thrown out. Much dirt and sand have washed in and covered the vein; but general report says, that the mine has no water in the interior, and that the ores were so rich that the best yielded from twenty-five to thirty marcs of silver for twenty-five pounds of ore.

The mines of Churunibabi, Pinal, Huacal, Aguage, and many others, are situated to the north and north-east of Nacosari, at no great distance from San Juan del Rio, built upon a stream which falls into the Yaqui. These minerals are equally rich with those already described. Pinal contains a greater proportion of gold than silver. It is recorded in the archives of Arispe, that the former owner, a lady, by name Maria Quijada, lent, at one time, 700 marcs of gold for the use of the Government.

Churunibabi is a very old mine, worked in the same way as San Pedro; as, indeed, are all the mines in this part of the country. The direction of the vein is east and west, the breadth two varas. The last persons who undertook to work this mine, were three men by the names of Escalante, Vasquez, and Coulla. They cleared away the rubbish at one end until they found a pillar, left to support some of the old workings, from which they took ores that produced 70,000 dollars, and yielded seventy marcs of silver per carga, of 300lbs. Not immediately finding the principal vein, they divided the money, and discontinued their works. The mine is laid open from the surface 400 yards in height. Tradition says that the first discoverers found the vein of virgin silver half a vara in breadth, that it was abandoned in the Apache war, with the vein as described above two varas, and ores of seventy marcs per carga. The richness of these ores appears almost incredible, but when we consider the great quantities of bars of silver that Sonora has produced,

without the aid of quicksilver, the metals must have been very rich and abundant.

Ten leagues to the west and south-west of Nacosari, and six to the north of San Juan, are the mines of Toubarachi and San Pedro Vigilia, with ores of from six to eight marcs per carga.

To the west of Arispe are the mines of Santa Teresa, of gold and silver, completely virgin, and the Cerro, or mountain of San Pedro, which contains innumerable mines and veins untouched.

In all the districts above described, the roads are only passable for horses and mules, the country being very mountainous, but not of very great elevation. None of these mines are more than six or seven leagues from rapid streams of water, sufficiently considerable to work almost any machinery.

The mines of La Agame, near Horcasitas, are famous for the abundance and richness of their gold ores. Those of Lampazos and Palos Blancos, five leagues to the south-west of Tepache, are likewise excellent veins and rich ores.

I have here mentioned the most considerable mining districts, but in Sonora almost every mountain and hill contains silver and gold. Even in the plains, beds of native gold have been found in grains, varying in size from one to sixty ounces, as in Cieneguilla, San Francisco, San Antonio de la Huerta, Mulatos, Baucachi, and various others. Silver has been found in immense balls in Arizona.

Besides the towns already named, those of most note in the northern part of the State are Dolores, Cucurpe, Tuape, and Opodepe on the river Dolores; Banamita, Cinaguessci, and Sonora, on the river Sonora; Bacuachi and Barispe, to the north of Arispe; there are likewise some good settlements on the Ascension river, and in the Pimeria Alta.

The valleys through which the rivers Sonora and Dolores flow, are much more fertile and abundant than the valley of Oposura, particularly in grain; they are also considerably larger.

Of the Indian tribes to the North of Arispe and Fronteras, little is known, except by the natives of the country. No dependance can be placed on the accounts given by the Spaniards, who were cruel colonizers, and have always provoked that barbarity of which they so much complain. I have seen much of

Indians, and am acquainted with most of the tribes that inhabit the west country that stretches from Florida, by Texas and Cohahuila, to the Pacific. I have invariably found them kind and harmless, when well treated. The Apaches of the North are an extremely independent and high-minded people. They have very light complexions, and will not live in towns, or in a domesticated state, but subsist entirely by hunting. They are very brave, good horsemen, handle the lance remarkably well, and are good marksmen with the bow and arrow. The Governor of the State, Don Simon Elias, told me, that if an Apache leaves his hut for one minute, on his return he examines his bow, turns over every arrow, and looks at the point and feather, so that he is always prepared for enemies, or game. The continued wars carried on against them by the Spaniards for many years, and conducted by cruel and rapacious officers, gave them the greatest abhorrence of their conquerors, but they entertain no antipathy towards the Creoles born in the State; and frequently when the Spaniards were obliged to sue for a suspension of hostilities, they sent two brothers, called Geronimo and Leonardo Escalante, to treat. These men exercised so great an influence over the Indians by their mode of treating them, that they always succeeded.

In the part of Sonora last described, the climate is charming, the thermometer ranges betwixt 50 and 84; the atmosphere is always dry and clear. The inhabitants require no fires in the houses in winter, nor are they oppressed with the summer heat. In the mountains, the evenings and mornings are sometimes chilly. The natives live generally to a good old age: the women are prolific, and bear from eight to twenty children, and in some instances have exceeded that number. In Oposura many of the women have what are termed "buches" (wens), in their necks, like the Savoyards. Some few are very much disfigured with them; they attributed it to some peculiarity in the water, the effects of which are confined to this particular spot, for the inhabitants three leagues above and below it are free from any thing of the kind.

In this northern part of the State the curacies are of immense extent, many of them from thirty to forty leagues in length.

The Curas have to do the whole duty without any assistance, to attend three or four chapels, to perform mass, and baptise, to confess the sick and bury the dead. The severity of this duty is the more felt, because they know how many are living in large cities rolling in wealth, without occupation. The Curas of Sonora are in general plain, well educated, sensible men, very lively and sociable, and except when in the performance of their duty, dressed like rancheros, or other citizens. They join in all the little diversions of society, and from what I could observe, and hear, they take the greatest care of their flocks, and are much looked up to by every class of people.

I left the North of Sonora on the 8th of May, 1826, with sincere regret, after having spent three months there, which I shall ever consider as the most agreeable part of my life. The route to the capital, El Fuerte, is nearly due south from Oposura; it lies through a country of little interest, the road winding continually through deep glens between ridges of mountains of a secondary class. On the way there are many towns and villages, besides numerous estates and farms. The principal towns are Tepache, Batuca, Onabas, Mobas, and Los Alamos. The rivers which cross this road are the Oposura, Yaqui, Chioc, and Mayo. The inhabitants are courteous, and hospitable to strangers. The distance is one hundred and twenty leagues. Alamos is a very fine town, between the rivers Mayo and El Fuerte, about sixteen leagues from the mouth of the latter. and thirty leagues from the former, the whole of which is a plain. It contains some celebrated mines, worked to a considerable extent, and with great skill and regularity. They belong to many different proprietors, being mostly divided into small shares; but the principal miners are the family of Almados. four brothers, who have amassed great wealth, and are said to possess at least half a million each. The eldest, José Maria, has in his house upwards of five hundred bars of silver. The mines of Alamos are much of the same description as those of Catorce, with veins of from six to eight varas in breadth, and ores of from fourteen to thirty marcs of silver per monton, which are generally reduced by amalgamation. The mines and reduction-works lie nearly five leagues to the north of the town.

There are, however, a few to the south-east. Alamos contains some very good streets, well paved, and the houses are generally built of stone, or brick stuccoed white. Those which surround the square are of more modern architecture, and belong to the principal miners and merchants, who are numerous and wealthy. There are many capitalists in Alamos with from two to four hundred thousand dollars in silver and gold; and I have been informed by respectable authority, that the merchants and miners have at least six millions of dollars in specie and bars. Provisions are excessively dear, being brought from a great distance, for the country round is very sterile, or at least has no water to fertilize it. That used in the town is drawn from deep wells, and is very bad, and scarce. Wheat and corn are sent to Alamos from Ures, and the rivers Oposura and Dolores. Yet the inhabitants live sumptuously. They differ very much in character from the natives of Upper Sonora, for they are proud, reserved, and unsociable even amongst themselves, and have no amusements except gambling, which they carry to excess. The new church of stone is a very elegant building; it was only finished in 1826. In the inside of the altar they have placed in the wall, in carved stone, the arms of the King of Spain. The Alameda is a pleasant and agreeable promenade, formed of avenues of poplars, with stone seats. There are two companies of volunteers, or militia, consisting of about two hundred men, commanded by Don Francisco Almado. Alamos is noted for containing the greatest female beauty in the Mexican Republic, the daughter of a very respectable merchant. The population may be estimated at six thousand souls, and from three to four thousand more are employed in the mines.

To the westward and north-west of this place, as far as the river Yaqui, and up that river to near the Presidio of Buenavista, lies a fine and fertile country, inhabited by the Yaqui and Mayo Indians, who are very numerous, and live in towns. Those of the Yaqui tribe are Belen, Huadibis, Raum, Potan, Bican, Torin, Bacum, and Cocorun, which extend along the southern bank of the river, surrounded by beautiful gardens, highly cultivated, each family having one. Belen alone is on the north bank, and nearest the Gulf of California.

The Mayo towns are Santa Cruz, in the mouth of the river Mayo, which contains nearly ten thousand inhabitants, Echajoa. Curimpo, Nabajoa, Tuia, and Camoa; the whole are on the southern bank of the river Mayo, and they contain altogether a population of sixty thousand souls. These Indians are excellent labourers and miners;* and besides those who live in the country above described, thousands are scattered through all Upper Sonora, in the towns, on the estates, and in those mines which are worked. They are a dark brown race, tall and well made, entirely in a state of nature, and they possess the finest country and climate in all Sonora. They go nearly naked, only using a piece of cotton, which they throw round the loins, or a small blanket. Their weapons are the bow and arrow, but they do not point them, and are quite inoffensive. The Yaqui is naturally docile; their chief is a general by title, named Cienfurgos, (or one hundred fires.) He is a very intelligent good man, and took great pains to explain to me the character of the people, the situation of the towns, their population, and distance from each other.

The Governor, Don Simon Elias, informed me likewise, that in the great plains between the rivers Mayo and Yaqui, are large lakes, which, at the rainy season, overflow the country, and leave behind a slippery black mud, which produces a most luxurious pasturage, abounding in an infinite variety of herbs. He described a bean as being very abundant, which agrees with the vanilla. He is a man of undoubted veracity, and explored, with his troops, the whole country in the end of 1825.

The road from Alamos to El Fuerte is excellent for coaches, and the distance twenty-four leagues; the direction a little to the southward of east. The country is almost entirely without population. El Fuerte formerly contained no more than a few scattered houses, but has risen within these three or four last years, to the rank of a considerable town, and is fast increasing. The situation is charming, for El Fuerte is seated upon the southern banks of the river of that name, which is a quarter of a mile in breadth, at an elevation of about thirty yards

^{*} I do not mean to say, that they are acquainted with mining, but they will move a hill from one side of a river to another, if they are ordered.

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above it, and commands a fine prospect both up and down the stream. Since Sonora and Cinaloa have been incorporated into one of the Federal States of the Mexican Republic, this place has been made the seat of Government, the residence of the Governor, the Congress, and Tribunal of Justice. The Governor of the Mitre likewise resides there. This is the point where the Spaniards rested in their conquests to the north for many years, and established a fort on an eminence between the town and the river, which gave its name to the town: it contains at this day at least four thousand inhabitants.*

At length the pieces of native gold and silver, and the gold dust, which the Indians brought down to trade and barter with their new neighbours, induced the Spanish Government to push their conquests farther, and the country was occupied as far as the Rio Colorado. The name given to the district by the first settlers was Senora, which has been corrupted to Sonora. In El Fuerte there is a good church, and a fine square, round which there are some excellent houses, very spacious, and built of stone. The Congress consists of eleven members; five from Upper, and six from Lower Sonora, who hold their sittings in a large hall in a private house, which has been furnished them. As in Alamos, every thing is dear and scarce. It was proposed, in 1825, to build a mint, in order to coin the metals produced in the State, but the contract has not yet been carried into effect. The heat in El Fuerte is extreme in summer, from March until July. Continued winds prevail at this season from the south-east, and after passing over the whole of Cinaloa, which is a whitish sand, penetrate into the houses, and render it impossible to sit still even in a cloth coat. To avoid as much as possible this inconvenience, they place the doors and openings for windows fronting the north, when the situation will admit of it. The only comfort a person finds at this season, is to eat melons, which are abundant and cheap, and to bathe in the river in the morning before sunrise, and in the evening. Hitherto I had seen no rain in Sonora, but on the 18th of June, we began to observe to the eastward, indications of the approach of the rainy season, which generally commences about the 24th. I was now ready, and bad made arrangements with my friends to leave them behind, and return alone with my servant to Mexico; and set out accordingly, accompanied by one of the Members of Congress, who was going to see his family in Culiacan, from whom I derived much interesting information on the road.

From El Fuerte, the roads through the whole of Cinaloa, in the travelling season, are superior to any that I ever passed over, not excepting the macadamized ones of the present day. They are of a sandy clay, almost without a pebble, and perfectly even and smooth. On the way from El Fuerte to Culiacan, there are several respectable towns, and a number of small ranchos. The towns of most consequence are Cinaloa, Mocorita, and Morito, none of which however deserve a particular notice. The distance between the two places is about eighty leagues. Culiacan is one of the oldest towns in Cinaloa, and in respect to size and regularity is superior to any, as it contains eleven thousand souls. It is prettily situated on rising ground, above a river of the same name, on the south bank, just above its confluence with the river Mayo, and is sixteen leagues from the sea. The square in the centre of the city is surrounded by the fine houses of the principal inhabitants, from each corner of which the streets branch off at right-angles, and are intersected by others, which run east and west, north and south. The church is an ancient and capacious building, and contains some respectable paintings. The lands in the vicinity are very fertile, particularly the valley through which the two rivers wind, and which contains many fine estates, and farms so well cultivated, as to present to the eye a very varied and pleasing prospect. There are three or four families in Culiacan who pride themselves on the antiquity of their names; the Espinosas de los Monteros, Las Vegas, Las Roxos, and Martinez. So afraid are they of mixing their blood with any of inferior quality, that four daughters of Martinez have married four brothers of Las Vegas, and the youngest daughter is waiting for another Vega, who is too young to marry. Though the people are usually proud, 2 Q VOL. I.

^{*} Cortez, on his voyage up the Gulf, made no establishment north of San

like those of Alamos, they are more friendly and hospitable. The young men are very polite, of genteel address, and display the height of Mexican fashion in their dress. The ladies of Culiacan are justly celebrated for their fine complexions, and graceful forms. They are remarkably fond of music and dancing; the instrument which they prefer is the harp, but several play on the piano-forte and guitar, and they sing well. I remained there six days, well entertained the whole time with a variety of amusements and diversions peculiar to this part of the country.

While I was in Culiacan the rains commenced, on the exact day when they always expect them, viz: the 24th June. In the short space of four days all nature seemed changed, for on leaving Culiacan and proceeding to Cosala, instead of passing through a country without seeing a blade of grass or a leaf on the trees, for days together, every thing was clothed with verdure; grass had shot up from two to three inches high, even on the roads; the trees were throwing forth their leaves and blossoms, and every thing promised a most luxuriant scene.

Cosala is thirty-five leagues from Culiacan, to the South, a little Easterly, and covers nearly as much ground as the latter, but is more interspersed with gardens: it is well built, but not with so much regularity, and contains no more than five thousand souls. In respect to the commerce of the two, there is little difference; both have a very considerable trade.

Cosala is a mining district, and within five leagues of the town there are several good mines, but the principal one is that which belongs to Don Francisco Iriarte, called Nta Feñora de Guadalupe, which contains a vein of gold of considerable breadth. The mine is perfectly dry, at a good elevation from the plain, and might be worked to ten times the present extent; but the owner bears the reputation of being so capricious, that instead of working the mine, he sometimes allows it to lie idle for five or six months, and when at work, never takes out more than four arrobas, (one hundred lbs.) of gold per week. It is said, that he has more than two millions of dollars in gold and silver in his house, but this, from the character of the man, it is impossible to ascertain. He lives very economically, but

seldom goes abroad, and has three sons and a daughter, who never even go out of his sight; and, notwithstanding his enormous wealth, his sons keep a shop in Cosala. It is said, that in 1825, some foreigners offered Don Francisco Iriarte one million of dollars to allow them to work his mine for two years, but that he refused, alleging that he did not want money, and that if he did, he could take a million out himself.

In Cosala, the people have wens in their necks, as in Oposura, but they are even more common, and extend to the men as well as the women: they are also frightfully large, some having double ones. I saw a whole family of women, who had bunches of three or four: they looked like pelicans. They attribute this disease to the water of the neighbourhood.

During the rainy season, the traveller seldom attempts to journey down the coast, as the roads, from the heavy rains, break up, and become impassable: the rivers, too, swell, and the crossing them becomes dangerous. I therefore resolved to cross the Sierra Madre at this place, and to return to Mexico by Durango.

From Cosala to the foot of the mountains, the distance is only five leagues, due east. You stop at a little rancho, called Santa Ana, in the neighbourhood of which there are some veins of silver and magistral. The inhabitants of this place, about twenty in number, had all of them wens, and some are so dreadfully disfigured by them, that to look at one of them is disgusting.

At Santa Ana you enter a glen (La Quebrada), and soon get enveloped by the mountains, which rise almost perpendicularly. The glen is very narrow, and the bed at the entrance is composed of a coarse gravel, with which, after ascending seven or eight leagues, immense blocks of porphyry, granite, lime-stone, and alabaster, are intermixed. There being little sand in the Sierra Madre, at all seasons of the year there is a small stream running down this canada, but not sufficient to impede the traveller; but after a succession of heavy rains for eight or nine days, the waters increase considerably, and I found it very difficult to ascend. The glen is so crooked that it was necessary to cross it every two or three minutes, and in many places to ride

up the stream from twelve to eighteen inches deep some distance, there being no side paths. This would have been impracticable for horses; mules only could have passed over a bottom composed of loose stones, of all sizes and forms, under the water, and even they frequently sink a foot or more at a step. The first night we slept in a shed, that we found about five leagues up the glen, completely drenched with rain; and the following day we accomplished eleven leagues more to the rancho de San Jose, where we passed a most uncomfortable night. Early in the third morning we performed six leagues more, which were worse than any which preceded them; for the ascent through the canada became so steep, that we were continually annoyed by cascades or falls of water, from three to twenty feet in height. In some places it was necessary to dismount and lead the mules, or we might have been washed away if the animals had lost their footing. However, we cleared this glen about one o'clock, and arrived at a few huts, called Los Vivores, situated upon a plain, three leagues in breadth, which seemed to form a first tier of the Sierra Madre, about four thousand feet above the level of the sea. The morning had been delightfully fine, and the continued change of mountain scenery, clothed with an endless variety of trees and shrubs in full bloom, with the hollow roaring of the waters, and the echo of our voices, had an enchanting effect. I observed nothing of volcanic appearance in these mountains. They seemed generally to be formed of lime-stone, granite, and porphyry, of various kinds. The soil was a red and grey clay. Towards the bottom there are fine beds or veins of beautiful jaspers; the strata of minerals are also very abundant, not only silver, but iron and copper. Towards evening I resolved to gain the summit of the Sierra, and to sleep at the top, which now lay before us, and seemed almost perpendicular. I confess, that I felt a little repugnance, after so much fatigue, to cross a place, which, to me, appeared terrific and impassable; but my guide told me that the road was good and dry, and that there was no danger. The evening was fine, and in less than half an hour after commencing the ascent, I found myself amongst young pines. We continued to ascend by abrupt windings, so steep that we could

see nothing behind us but the plain below, nor before us, more than a few yards of the road. The path, however, was good, and about six feet in breadth; and a little after seven in the evening, we gained the summit, on which we found a plain, with good pasture, and a lake of water. This place was called La Laguna. The pine trees about it were of immense size, some of them being fourteen and fifteen feet in girth. I conceive that we must have ascended, in the course of the evening, four thousand feet at least, which brought us to the edge of the summit of the Cordillera. There we had to suffer the worst night that I ever experienced; having left Cosala only three days, one of the hottest climates in the Republic, and being now compelled, at the elevation of eight thousand feet, to sleep in the open air, in such a rain as I seldom, if ever, saw, without any shelter but the pine-trees. It thundered and lightened incessantly until daybreak, when we started, and reached the rancho of San Antonio, sixteen leagues, about four o'clock. This was a hard day's work, but I would rather have died upon the road, than have slept out a second night. The first three hours of this day's journey were over a very rugged surface, interspersed with other plains of small extent; after which, we entered an open fertile tract, with rich pastures and fine limpid streams, which took a south-westerly direction, and must some of them find an issue through the glen which I had passed, while others fall into the rivers south of Cosala. The forests were very extensive and luxuriant, and in many places there are openings in the woods, which resembled some of those artificial scenes that are formed in parks, in England, with a fine herbage, streams of chrystal water, and the foliage of the trees feathered to the ground. I regretted much not having a companion to enjoy such scenery with me, for so much beauty did not seem intended to gratify a single eye. After entering upon a more open plain, I discovered a number of cattle, which seemed to bespeak some establishment, and half an hour brought me to San Antonio, a rancho of about eight houses. I went to the best, where I was hospitably treated, but not until I had convinced the landlady and her daughters that I knew the creed and commandments, the Lord's Prayer, &c., and agreed

that the Priest of Gavilanes was the best man in the world, though I had never seen or heard of such a person. I stayed here all the next day to rest my mules, and was really astonished when the people related to me stories which they had heard of the English. I found this place half-way between Guarisamey and Papasquiaro, two celebrated mining districts, and met a quantity of quicksilver and other materials, going to Guarisamey. The arrieros told me that they should return to Durango with silver bars. I was now on the Table-land, in the State of Durango, and in every direction I saw great herds of cattle, for which Durango is famous, with herdsmen, called Vaqueros, mounted, and always on the full gallop, but could see no houses. They told me they had their habitations at a great distance from the road, in situations where the cattle came to water, when they could count them, &c. &c.

Twelve leagues from San Antonio, there are an immense number of large caves, which surround a circular valley about one hundred yards in diameter. The road lies down a cañada, through which a fine stream of water runs. I found, from the remains of old fires, that this was a regular stage for travellers, and I accordingly got a comfortable cave prepared for my own lodging. I have often met with and heard of echoes, but nothing that at all resembles this. The caves are of different stories, some a little distant, and the voices re-echoed a hundred times. At night I sung, and played the flute, and was wonderfully struck with the effect. The cave which I slept in, was one hundred and fifty-six feet in length, ninety-six in height, and forty-five in breadth.

Fourteen leagues more brought us to the great caves, called Las Cuevas de San Miguel. In this day's journey, I found the daisy, meadow-boat, lupins, marsh-mallow, crocus, daffodil, and a variety of English flowers, with white clover, and a herbage which had in general the appearance of the herbage in England, in April or May, except that in this country and climate nature displays a greater variety of flowers at the same time. The large cave of San Miguel I found to be two hundred and fifty in depth, with a regular arched roof. In the back wall

there are twenty-three openings of different sizes; I penetrated about one hundred and eighty feet into one of them, but from the intricate windings and subdivisions inside, not having any light except a piece of pine wood, and not being able to persuade my servant to follow me, I was obliged to abandon the attempt to explore the most curious natural excavation that I had ever seen. From this place to Palomas, the distance is ten leagues, to Laguna Colorada seven leagues, and to Durango seventeen. The country is of the same description as that through which I had already passed, except that the population increases much as you approach Durango. On the 19th of July, I arrived there; and went to the house of the Canonigo Don Cayetano Salcedo, an old friend of mine, where I rested fourteen days.

THE END.