

each Hacienda there was a large tract of ground covered with Mimosas, and abounding in hares, but without any symptoms of the labour of the agriculturist having been ever employed upon it. I was assured, however, that a great part of this land had only been thrown out of cultivation since the Revolution, when the failure of the mines at Guānājuatō deprived the farmers of their market.

11th. From Zēlāyā to Irāpūatō, the distance is fourteen leagues. We breakfasted at El Rancho de los Huāgēs, about six leagues from Zēlāyā, and reached Sālāmāncā at three in the afternoon. The town, like most of the smaller towns in the Bāxīō, is half in ruins, but the situation is pretty, and the ground about it rich. A violent storm came on shortly after we had quitted Salamanca, and converted, in a moment, the fine loam over which we were passing, into a mass of mud, through which we ploughed our way with great difficulty. We did not reach Irāpūatō till half-past eight o'clock, although the distance from Salamanca does not exceed five leagues. Our beds had fortunately been kept tolerably dry by their oil-skin covers, but we were glad to take refuge in them immediately, as the Meson afforded no facilities for drying, or even changing our wet clothes, the rooms being entirely lumbered up with the saddles, and other packages which we were forced to shelter there from the rain.

The town of Irāpūatō contains, according to the census of 1825, 16,054 inhabitants; by that of

1823, the number appeared to be 21,030. Some of the public buildings are fine, particularly the convent of Nuns, called de la Enseñanza. There are a few cotton-spinners and weavers, but the bulk of the population consists of "Lābrādōrēs," (agriculturists,) who reside in the town, and have estates near. Of these there are 971 "Vecinos," (heads of families.)

Salamanca contains 485 "Lābrādōrēs," and 1,091 "Artesanos," on a population of 15,053 souls. In the district of Irāpūatō there are thirty Haciendas de Campo and sixteen Ranchos; in that of Salamanca, twenty-nine Haciendas and sixty-nine Ranchos; many of which, however, are very small. From Zēlāyā there are no similar returns.

12th Nov. From Irāpūatō to Guānājuatō eleven leagues.

We commenced our journey late, having been assured that the distance did not exceed seven leagues. After breakfasting at the Rancho of La Cālērā, we reached Būrrās, a village belonging to the Marquis of Rāyās, seven leagues from Irapuato, and found, to our great surprise, that we had still four leagues to go. The situation of Būrrās is extremely picturesque. In the middle of a country almost desert, you come suddenly upon the borders of a Bārrāncā, the whole of which is a mass of verdure. Vegetation follows the course of a small stream that runs down the centre of the ravine, and extends for some distance on either side. The effect

reminded me of some of the drawings in Denham's African travels, where a little spot, with something like water and freshness, is represented in the midst of a scene of desolation.

The country between Būrrās and Guāñājuāto is uninteresting, and of the town itself nothing is seen until you reach the Gate of Mārfil, where you enter the suburb of that name. The houses follow for nearly a league the direction of a Cañada, or ravine, on each side of which there is a long line of Haciendas de Plata, (amalgamation works,) intermixed with houses, varying in height and shape according to the nature of the ground. On one side there is a raised trottoir for foot passengers; but coaches, and animals of all kinds, proceed up the bed of the river, down which, in the rainy season, a torrent occasionally flows with dangerous impetuosity.

Few years pass without some accident occurring; yet no part of the immense mineral wealth that Guanajuato has produced, was ever devoted to the improvement of the present entrance to the town, and you cross the torrent thirty times between the gate and the principal street.

We were met at some distance from Marfil by Mr. Williamson and Mr. Jones, the Directors of the works of the Anglo-Mexican Mining Association, who kindly undertook to lodge our whole party in a house belonging to the Company, where we were happy to find ourselves restored to the luxuries of space and cleanliness, after having been so long re-

duced to the confined and dirty rooms of the Ventas upon the road.

As it is not the object of this work to give a geological description of the Mining Districts, I shall beg to refer my readers to the Baron Humboldt's scientific researches for any information that they desire upon this point; and merely state here a few facts, without a knowledge of which, any account of the operations of the Companies established in Guāñājuāto must prove unintelligible.

The Veta Madre, or great Mother Vein of Guanajuato, has produced, since the year 1766, (before which time I have no returns,) 225,935,736 dollars.* It is composed of several parallel veins, running in the direction of N. W. and S. E., and varying in width, where they combine into one mass, from five to eighty varas. The miners distinguish the three principal branches of the Vein by designating them as El Cuerpo Alto, El Medio, and El Baxo; and it is observed, that the points where the three Cuerpos have been found to approach each other most nearly, and to be richest in silver, correspond with the valleys that intersect the direction of the Vein, in which the rich mines of Sērēñā, Rāyās, and Cātā, are situated. The town has been entirely created by the mines, and is very irregularly built; the houses and streets being distributed rather according to the vacancies left by the surrounding

* This is the amount given by Humboldt's Tables of Produce, in conjunction with the returns from 1804 to the present day.

mountains, than by any rules of art. This is particularly the case with the amalgamation works, one of which sometimes occupies a whole ravine, the spaces above, on either side, being crowded with miners' huts. The streets are full of ascents and descents, many of which are so steep as to render the use of four mules in the carriages of the more wealthy inhabitants almost universal. The churches, and some of the houses, are fine, and the *Ālhōndīgā*, a large square building used as a public granary, forms a remarkable object, and is visible from every side.

The mines are scattered in different directions round the town; and in the vicinity of some of them, little "Pueblos" have been formed, which may be considered as the suburbs of *Guānājūatō*. This is the case with *Vālencĭāna*, (where the population formerly amounted to 7,000 souls,) and *Rāyās*; and, in a less degree, with *Sērēnā*, and *Villālpāndō*. The Haciendas are mostly close to *Guānājūatō*, and though now in ruins, their number and extent attest both the former importance of the mines, and the opulence of the *Rescatadores*; (amalgamators,) by whom these expensive buildings were raised. Few or none of them possessed a sufficiency of water to work their machinery, for which purpose mules were employed; and fourteen thousand of these animals were in daily use before the Revolution. The *Rescatadores* purchased their ores at the mouth of the shaft, relying entirely upon their own powers of

estimating by the eye the value of the montones exposed for sale, in such a manner as not to make a disadvantageous bargain. In this science they attained great perfection; for more fortunes were made in *Guānājūatō* by Amalgamation works, than by the miners themselves; while the extent to which the system was carried afforded to the successful adventurer the means of realizing instantly to almost any amount. During the great Bonanza of the *Valenciana* mine, sales were effected to the amount of eighty thousand dollars in one day; and it is to this facility in obtaining supplies, that the rapid progress of the works in that mine, after its first discovery, may be ascribed. Had it been necessary to erect private amalgamation works, in order to turn his new-born riches to account, many years must have elapsed before the first Count *Valenciana* could have derived any advantage from his labours; for when fortune began to smile upon them, the man, who was destined in a few years to rank as one of the richest individuals in the world, did not possess a single dollar.

The system of "Rescatadores" still exists at *Guānājūatō*, but upon a very small scale; most of the capitals formerly employed in this way having been lost, or withdrawn, during the Revolution. The sales at the mines, in 1826, seldom exceeded 1,500, or 2,000 dollars in the week. The Foreign Companies wish to unite the profits of the amalgamator with those of the miner, and have consequently

fitted up extensive Haciendas of their own. The Anglo-Mexican Company possesses eight of these Amalgamation works; the United Mexican four; and this new plan, should it be found to answer, will undoubtedly tend to discourage, for some time, the re-establishment of the independent Haciendas.

On the morning of the 13th of November, we visited the mine of Villalpándö, situated in the mountains to the East of Gŭänājuatö, about four leagues from the town, upon a separate vein, totally unconnected with the Veta Madre. A number of small mines are united in the "Negotiation" of Villalpando, but the depth of the deepest levels does not exceed two hundred varas: the ores are rich in gold, and in appearance resemble those of the Rancho del Oro: picked stones have been found to contain as much as two ounces of Silver, to one pound of ore; and the Ley de Oro, or proportion of gold found combined with this Silver sometimes amounts to five hundred and fifty Grains in the marc; the value of which at the Mint is raised, in these cases, from eight and a half to thirty and thirty-five dollars. The principal proprietors of the mine are the Conde Vălenciănă, the Countess Rŭhl, and the Conde de Pĕrĕz Gălvĕz. The Anglo-Mexican Company, to which it belongs, was in possession of eight *Barras*, or one-third of the mine; but the whole outlay was to be repaid out of the first produce, and a fund of reserve of 150,000 dollars for future contingencies, to be set aside, before any division of

profits could take place. The drainage was conducted by four mălăcătĕs, (three English and one Mexican,) and had been effected, in three months, to within twenty yards of the bottom of the shaft, at an expence of 84,000 dollars. The buildings connected with the mine had been all brought into a state of complete repair, and as the weekly produce already amounted to three hundred Cargas of ore, the prospects of the Adventurers were thought to be highly favourable. The mine was worked principally by Bŭscōnĕs, (Searchers,) whom the hope of a rich prize, (from the value of the gold in some of the ores,) attracted in great numbers. Each man received in payment one-half of the ores which he had raised; and at the weekly sales it was curious to observe the eagerness with which all strove to attract the attention of the buyers, by putting their best stones in the most advantageous light, and sprinkling them with water, in order to show the metallic particles. The sale is conducted by the "Administrador," or principal Overseer of the mine; and as he moves from heap to heap, the "Rescadores" make their offer in a whisper, and the name of the highest bidder, with the price paid, is inserted on the list. The ores are immediately taken possession of by the Cărgădōrĕs, (Porters,) by whom each Rĕscătădōr is accompanied; and sent down to the Hacienda in the town, where the Buscones receive their money on the following day.

Nothing can be worse than the road to Villal-

pando: from the moment that you quit Guanajuato, all traces of its vicinity are lost, and you traverse ravines as wild as those of Zīmāpān or Zītācūarō, with as little to remind you of the neighbourhood of man. There is not a tree to be seen in the whole four leagues, and many of the ascents are so steep that we were glad to be provided with animals accustomed to face them, instead of trusting to our own. Mrs. Ward was mounted on a magnificent mule, and I was provided with a horse, which Mr. Williamson had the kindness to make over to me afterwards, and which I found at once the most useful and the most dangerous creature that I almost ever possessed. I never saw it tired, but even when ridden with the utmost gentleness, it was difficult to keep it quiet, and if once put out of temper, there was no remedy but giving it up altogether for twenty-four hours.

Tuesday, Nov. 14.—We visited the mine of Sirena, in which the Anglo-Mexican Company holds ten Barras in perpetuity, and had acquired four more for twelve years, by an additional advance of 100,000 dollars. The mine had been nearly drained by Mālācātēs in six months, and from the levels already above water at the time of my visit, ores were raised in sufficient quantities to cover the expences, and to leave a surplus of from 1,000 to 1,400 dollars weekly. Sirena lies about a league from Gūanājuātō: the road out, which has been repaired by the Company, is good; and the mine

itself, being situated in one of those hollows in which, as I have already observed, Nature seems to have deposited the great mineral riches of the district, and not having been worked hitherto to any thing like the same extent as the other mines upon the Vētā Mādrē, is considered by the natives as one of great promise. The outlay upon it, (including the purchase money of ten Barras,) was, in September 1826, 255,201 dollars.

From Sirena we proceeded to the Hacienda of Pästītā, an amalgamation work entirely fitted up by the Company, with twenty-eight arrastres, and a water-wheel for the stampers, which is expected to work six months in the twelve: 42,860 dollars have been expended upon this Hacienda by the Company, but it is now held at a nominal rent of five hundred dollars per annum, until the whole outlay be repaid, so that they have, in fact, the use of it for eighty years rent free.

The Hacienda of San Agüstīn, which we next visited, is the property of the Association, and has cost altogether 116,365 dollars. The purchase money was trifling, but a great additional outlay was occasioned by the preparations for the introduction of the Cornish system of washing and reducing ores, —the new smelting establishment, which proved so complete a failure under the superintendence of Mr. Lucas, and the Freiberg revolving-barrels, which it has not yet been found possible to apply to the immense mass of ores that are subjected to the

process of amalgamation in New Spain. *Sān Āgūs-tīn* was the residence of all the Cornish miners, and for the credit of England it must be hoped that those who sought their fortune in Mexico are not to be regarded as a fair specimen of the population of that part of the British dominions. There were some good and useful men amongst them, who have continued in the service of the Association, and are now amongst its most efficient agents; but the generality of the Cornish have left behind them a character for ignorance, low debauchery, insubordination, and insolence, which has very materially diminished the respect which the Mexicans were inclined to entertain for the supposed superiority in intellectual acquirements of the inhabitants of the Old World. Nothing could exceed the indulgence shown by the authorities of *Guānājuātō* towards these men, six or seven of whom were often picked up in the streets drunk, and conveyed to the Hacienda of San Agustín by the very watchmen, who, if they had been natives, would have been lodged in jail; but their patience, as well as that of the mine-owners, who were compelled to pay enormous salaries, and to see their work badly done,* was nearly

* It must always be borne in mind, that although the outlay is made in the first instance by the Company, it is carried by them as a debt to the account of the Mine, and it is to be paid out of the first proceeds. It therefore becomes the interest of the owners to see that the work is properly performed; and to refuse to pass accounts whenever unnecessary expences are in-

exhausted, when the Directors in England were fortunately induced to abandon the system, and to employ natives in all the operative parts of their principal undertakings. The management alone is now European, and the persons entrusted with it having shown a proper disposition to conciliate the natives by acquiring their language, and only varying their mode of working in cases where some positive and evident advantage accrued from the change, the Mine-owners and the Company proceed towards the attainment of the common object with a mutual good understanding, and, consequently, with an increased probability of success.

There is a small steam-engine erected at *San Āgūs-tīn*, which is intended to be used both for sawing timber, and for braying ores: it puts in motion twenty-four stampers of three hundred weight each, and has likewise been applied with very good effect to the *Freiberg* revolving barrels. It consumes one *carga* (300lbs.) of wood in the hour, which, at three reals (of eight to the dollar) per *carga*, makes a total expence of nine dollars in the twenty-four hours. Another engine of fourteen horse power had been applied to the little mine of *La Purísima*, at *Santa Rosa*; but as it was not at work during my visit to *Guanajuato*, I did not think it necessary to ride

curr'd by those entrusted with the management. For instance, machinery sent out and not used, or mining works badly executed by foreigners, who are paid for executing them better than the natives, cannot, in reason or justice, be charged against a mine.