## SECTION V.

RETURN FROM DURANGO TO SOMBRERETE.—
ZACATECAS.—MINES OF VETA GRANDE, AND
OF THE UNITED COMPANY.—ROAD THROUGH
THE STATES OF GUADALAJARA AND VALLADOLID, BY OZUMATLAN AND TLALPUJAHUA
TO THE CAPITAL.—SOME ACCOUNT OF STATES
OF MEXICO, VERACRUZ, OAXACA, YUCATAN,
AND TABASCO.

I LEFT Durango on the 19th of December, highly gratified by the kind reception which I had experienced there from a number of most respectable Creole families, to whom I was introduced during my short visit. Amongst these were two sisters of General Victoria, very lively, and most enthusiastic politicians, a talent for which in Durango there was unfortunately much scope. The town was divided into two parties, Liberales, and Serviles; the first, the friends and supporters of the Governor, eager in the promotion of every useful reform; and the latter arrayed in battle under the banners of the Cathedral

Chapter, as the opponents of all innovation, particularly in matters connected with the Church. The struggle commenced by an attempt on the part of the State Legislature, to compel the Canons to apply to the purposes for which they had been specially bequeathed, certain funds appropriated by the Chapter; sunk in the mass of Church property, denominated Obras pias.

The Canons denied the right of interference on the part of the Civil Authorities, and for some time endangered the tranquillity of the State by the violence of their opposition. The dispute was, however, terminated amicably, a short time after my visit to Durango, the Chapter having consented to supply the money required by the Government as a loan, on condition that the proposed investigation should be dropped.

It was the intention of the Governor to employ these funds in the execution of a project, by which the appearance of the valley of Durango would be entirely changed. The town is now supplied with water by one solitary fountain, the spring (Ojo de Agua) of Los Remedios; and this, though sufficient for ordinary purposes, affords the inhabitants the means of irrigating only a very small portion of ground laid out in gardens in the vicinity of the town. It has been ascertained however, that, by bringing a canal from the river to the North-west of the valley, a sufficient fall might be obtained to distribute water to the whole plain beyond the capi-

tal; and this project has become the favourite scheme of the Governor, whose mind seemed devoted to its accomplishment. Its utility cannot be disputed, as it would bring into cultivation a large tract of beautiful land; but the city of Victoria derives such abundant supplies from the surrounding districts, that I know not whether the real importance of the plan is equal to that which the sanguine disposition of Mr. Ortiz induces him to attach to it.

I was much struck with the difference between the manner in which society is organized in Durango and in the Southern States. The women, instead of passing their days in languor and idleness, are employed, with bustling activity, in superintending the details of the menage, and even take a very efficient part in that most important department, the kitchen. The consequence is, that there is no part of the Republic in which the advantages of cleanliness are so highly appreciated, or the little comforts of life so well understood. My room at the Governor's was delightful, and I have still a lively recollection of the excellence of the Café au lait, which his kind and amiable wife brought me each morning with her own hands. I was told that this was general throughout the North, the Biscayan race and a system of good housewifery having spread together; and in Durango the general appearance of the women bespeaks more domestic habits. They are little seen in the streets, or at public places, and better educated at home. At a ball and con-

cert, which the Governor was good enough to give me the evening before my departure, I heard several very respectable amateur performers, particularly two sisters who played a duet together on the pianoforte with great facility of execution. But the queen of the evening was a young professional singer from Guarisamey, (the Pasta of Durango,) whose talents were undergoing the necessary cultivation to qualify her for sustaining the part of Prima Donna at the opera of the town. Her vocal abilities had been discovered by a friend of the Governor's, who recommended her to his protection; and though I cannot in reason be expected to be as enthusiastic in her praise as her "Apasionados" in Durango, I must confess that she had a most powerful voice, which, when modified by a little tuition, might possibly be rendered agreeable.

I reached Sombrerete without difficulty in ten hours; and after dining, and passing the night at Mr. Anitua's, I resumed my journey South on the following morning in the same manner; five relays of horses having been stationed for me on the road to Zacatecas—at the Rancho of Pancho Malo, Atotonilco, La Escondida, Rancho Grande, and Las Tortolas. At Fresnillo I expected to find my own horses, with which I intended to proceed direct to Zacatecas; but to my great surprise, I overtook Mrs. Ward and Mr. Martin there, the coach having been delayed a whole day at Atotonilco by a wheel giving way in passing a barranca a little to the

North of the Hacienda. It was hardly possible for such an accident to be more ill-timed, for there is not a room in the house with a whole door; and yet, in addition to chance passengers, they are tenanted by myriads of habitual occupants, who resist most strenuously every encroachment upon their territory. Fortunately, the country about is rather pretty, for there is a stream below the house, with some trees, and a little cultivation: there are likewise some hot springs, very inviting as a bath, but usually occupied by a succession of Indian women, two or three of whom may be found at almost any hour of the day sitting up to their necks in water, and very much amused at the mauvaise honte of the strangers, who have any scruples about joining so sociable a party.

I reached Fresnillo at three o'clock, having left Sombrerete at six. The distance is not less than seventy or seventy-five miles; but sterility is the decided characteristic of the whole intervening space. There are some extensive fields of maize, however, about San Juan de los Troges, (between Pancho Malo and Atotonilco,) and in the vicinity of Rancho Grande, where Mrs. Ward was magnificently lodged in the Hacienda of the principal proprietor; but those who are fortunate enough to have it in their power to pass over this tract of country as expeditiously as I did, should not stay to examine its beauties in detail. Upon Mr. Martin its gloomy appearance had such an effect, that he often declared that he was indebted to "Vivian Grey," the first part

of which we received at Sombrerete, for banishing a fit of the spleen, which might otherwise have endangered his life. The rapidity of my progress prevented me from feeling this in the same degree; and I was in such excellent condition for work, that after riding 150 miles from Durango in two successive mornings,\* I walked about Fresnillo all the afternoon, to make inquiries respecting the mines, none of which are now in activity. Some few were taken up in 1825 by the Mexican Company; but the contracts were so injudicious, and the terms so onerous, that they were abandoned, (not, I believe, without a considerable sacrifice,) as soon as public opinion with regard to mining speculations in England took an unfavourable turn. The town lies at the foot of an isolated hill, upon which the mines are situated; platforms for the erection of Malacates, and extensive excavations, are now all that is left to denote their former importance.

The road from Fresnillo to Zacatecas is excellent as far as Arroyo de en Media, (six leagues,) but the level country ceases at San Juan de la Calera, (two

<sup>\*</sup> Many people have thought Captain Head's account of distances exaggerated; but in countries where it is the custom to ride post, one hundred miles a day is by no means an extraordinary performance. I have myself ridden from Madrid to Bayonne, (one hundred "Leguas del Rey," or four hundred English miles,) in forty-seven hours; and I once went from Seville to London, when sent, under very pressing circumstances, with despatches, by Lord Heytesbury, in eight days and a half, (partly on horseback, and partly in a cabriolet,) and returned in nine.

leagues farther;) and from thence to Zăcătēcăs a succession of steep ascents and descents announces the vicinity of one of the minor branches of the Sierra Madre. The town itself is not visible until you arrive within half a league of the entrance, when you see it below you, following the direction of a deep barranca, (ravine,) of which the mountain called La Buffa, with a chapel situated upon its curiouslycrested summit, forms one side. The streets are narrow, and from the want of a good police, defiled with the remains of the "Matanzas," frequent in Zacatecas, where a great quantity of tallow is made. They swarm, too, with tribes of dirty children, whose appearance, like that of their squalid parents, is by no means prepossessing. But the distant view of the town is fine, from the number of churches and convents rising proudly above the other buildings; there are several excellent houses too in the vicinity of the great Plaza, where we were lodged, and the market before our windows presented both a busy, and a curious scene. It was abundantly supplied with fish, particularly "Bagre," (a large Tierra Caliente fish without scales,) as well as with vegetables and fruits. The quantity of Chile disposed of was really prodigious; waggons laden with it, drawn each by six oxen, were arriving hourly from Aguas Calientes, yet their contents rapidly disappeared, piles of Capsicum sufficient to excoriate the palates of half London vanishing in the course of a few minutes.

We arrived at Zăcătēcăs on the 21st of December, and employed ourselves till the 26th, in visiting the establishments of the two Companies, who have made this district the scene of a part of their operations.

These are the Bolaños and the United Mexican Associations, between which the principal mines of Zacatecas are very equally divided.

As a mining district, Zacatecas differs materially from Guănăjuato, for in lieu of one great mother vein, it contains three lodes nearly equal in importance, (those of La Quebrădillă, San Bernăbe, or Mălănoche, and Veta Grande,) with a number of inferior Vetas and Vetillas, which may be considered as ramifications of the principal lodes. Upon these nearly 3000 pits or shafts have been opened: (mostly "catas" of very inconsiderable depth.) The course of the veins is distinctly designated upon the surface, by the elevation of the crests, and may be traced even by the most unpractised eye. The works of the Companies, now that the mine of Quebradilla has been abandoned, are confined entirely to the veins North of the town. Quebradilla, which lies to the South of Zacatecas, has yielded three successive "bonanzas," (each more remarkable for the immense quantity of ores produced than for their richness:) the first soon after the Conquest; the second when worked by La Borde, (who, after Tlalpujahua and Tasco, came to make his last fortune at Zacatecas;) and the third as recently as

1810, when a Company, formed for the purpose in Zacatecas, divided upon its dissolution, in 1817, the sum of 75,000 dollars upon each "barr." But the mine was ruined in the course of their operations, and though contracted for by the United Company upon false representations, it was given up in 1825 by Mr. Alaman, who found, upon personal inspection, that the drainage could not be effected for a less sum than 400,000 dollars, while the accounts of the lower levels were too contradictory to afford any certainty that this large investment would be repaid.

On entering the mountains North of Zacatecas, about a league from the town is found the first of the two great parallel veins by which they are traversed. Upon this are situated the mines of San Bernabé, Malanoche, Pěrěgrīnă, and Rōndănēră, the three last of which are considered as one "negotiation."

San Bernābe was the first mine denounced in Zacatecas. The vein was worked by the "Conquistadores," à tajo abierto, (by an open cut,) for the space of 800 varas; and the opinion then entertained of its productiveness is recorded by an old song still in the mouths of the lower classes at Zacatecas, and composed in commemoration of the marriage of its first proprietor Ibarra, with the daughter of the Viceroy Velasco.\* The Company

has every reason to think well of this enterprise, for the amount of ores raised weekly in 1826 was considerable, the drainage nearly concluded, and the appearance of the new levels, which were about to be cleared, highly promising.

The shafts of Malanoche and La Rondanera lie about a mile and a half west of San Bernabe. The works extend over a space of nearly 800 varas, and the drainage was consequently proceeding very slowly; (about two varas in the week.) But the value of the ores raised, from the very commencement of the undertaking, had proved sufficient to cover one-third of the expence; and the produce was expected to increase rapidly as new levels were rendered accessible.

Not being a miner myself, I can only speak of the general mode in which the management of an enterprise of this nature is conducted, and of the feelings of the natives, (whom I always consulted,) respecting it. Nor must it be thought that, in this way, I could only view the favourable side of the question. There is so much rivality in mining matters in Mexico, that, by entering into communication with persons unconnected with a negotiation, I was sure to hear all the errors, (real or presumed,) that had been committed, and those too

corded, that I may be allowed to draw from the same source the only remaining record of Ibarra's good fortune. The verses are.—"Si los metales de San Bernabé no tuvieron tan buena ley, no casaria Ibarra, con la hija del Virey."

<sup>\*</sup> So many curious fragments of Spanish history would be lost, were it not for the "Romances" in which they are re-

painted in the very strongest colours. It must be a satisfaction therefore to the shareholders of the United Company to know that their prospects at Zacatecas were rated very high, their contracts pronounced to be unexceptionable, and their mines excellent. All, however, added, that it was to be regretted that a second Anitua could not be found to undertake the management. The present Director, Don Joaquin Iparriguirri, is a skilful miner, but has lost much of his former activity by age; and, at the time of my visit, Mr. Schoolbred, who had been recently associated with him, was too new in office to give that impulse to the system, which it appeared to require. It was thought that, under Mr. Anitua, what had been done in a year and a half might have been accomplished in much less time. his asymmetric doldar at alt under

The little mine of Lŏrētŏ, (like Sĕchō at Guanajuato, an entirely new undertaking,) borders upon that of Malanoche. It is situated upon a separate vein, and had, when I saw it, not only covered the advances made upon it by the Association, but began to yield a clear profit. The ores improved as the workings increased in depth, and they must now have reached the level at which the neighbouring mine of La Barguena, (worked to a much greater extent than Loreto,) was found to be extremely productive.

Besides the mines already enumerated, the United Company possesses that of San Acasio, situated upon the Eastern extremity of the Veta Grande, the second lode of importance, North of Zacatecas, nearly a league and a half beyond that of San Bernabé.

San Acasio belonged originally to La Borde, (whose operations chance always seemed to favour,) and yielded a bonanza famous in the annals of Mexican mining for its extraordinary duration. It lasted twenty-two years, (from 1765 to 1782,) and completely re-established La Borde's shattered fortunes, repaired by his success in the mine of Quebradilla, and restored to all their pristine splendour by this long series of successful enterprise. The mine is known to have been abandoned by his descendants when producing good ores in its "planes," or lowest levels; and in many of the upper workings the quantity of "Atierres" (heaps of poorer ores, not then thought to be worth raising,) is known to be so great, that an association was formed in 1823, by a number of native miners, to work the mine in the upper levels, merely in order to extract these atierres, the value of which is now better understood. The project was given up in consequence of the contract concluded by the owner with the United Company, whose operations embrace the whole mine.

San Acasio has four Pertinencias, at three of which Malacates were erected for the drainage, and the extraction of ore. In December 1826, the mine was producing weekly about six hundred cargas of ore, (principally "atierres") averaging seven marcs

per monton of twenty quintals. An increase either in the quality, or the quantity, was required in order to cover the expences, which, in so extensive an undertaking, were of course considerable. It was calculated, however, that four hundred cargas more,\* (making 1000 in all,) even of the same poor ores, would not only cover the "Memorias," but leave 1,000 dollars profit weekly. The Miners of Zacatecas entertained little doubt with regard to the issue of the enterprise of the Company at San Acasio, for no mine in the district bears so high a character: but the time requisite in order to reap the full advantage of the investments made is uncertain, from the vast extent of the works, which occupy a space of 800 varas upon the course of the vein. Mr. Alaman seemed to be of opinion in 1826, that nearly the whole of 1827 would be required to bring his operations to a conclusion, and some allowance must always be made for additional delays. In the course of the present year, however, the result must be known.

The Company is in possession of two Haciendas de beneficio; that of San José, in the town of Zacatecas, with fourteen Arrastres, and Cinco Señores,

without the town; which formerly belonged to La Borde. In his time it contained sixty arrastres. Only twenty-six are now in repair, but the number will be augmented as the produce of the mines increases.

The works of the Bolaños Company, (contracted for in 1825, as a desirable addition to the principal mines of the association, situated at Bolaños, in the neighbouring state of Jalisco,) are all upon the Veta Grande, to the Westward of San Acasio. They comprise fourteen shafts, (including the Tiro-General,) originally separate mines, but now connected with each other, and worked as one negotiation. These occupy a space of 1,200 fathoms upon the vein. Few exceed 300 varas in depth; all have been productive; many remarkably rich; and none have given reason to imagine that the vein was exhausted even in the deepest levels.

The two contiguous mines of Urīstă and Mĭlănēsă rank highest amongst those comprehended in the negotiation of Veta Grande. The first produced the capital out of which the fortune and title of the Counts of San Mateo (now united by marriage with the Marquisate of the Jărāl) proceeded; and to the second, the wealth of the Condes de Santiago de la Laguna was due. During the last forty years they have been worked, with the adjacent shafts, by the Fagoaga family, and have yielded (as stated in Table, No.9, annexed to the first Section of the fourth Book) 2,088,425 marcs of silver, (16,832,400 dollars.)

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<sup>\*</sup> It must be recollected that profits depend upon two distinct causes, the great abundance of poor ores, yielding a given profit upon an immense mass of "Montones," or a less copious extraction of rich ores, raised by fewer hands, and "reduced" with less labour. It is in the first that the great riches of Zacatecas and Guanajuato have principally consisted.

But during the last ten years the produce has barely covered the expences, and the proprietors have derived little or no profit from the concern, although the establishment has been kept up in the hope of discovering a "clavo rico," and obtaining another bonanza. Captain Vetch having convinced himself by a long and patient investigation, that the system of management was susceptible of great improvements, and that by reducing the establishment the receipts might, even in the present state of the mines, be made to exceed the expenditure, while the extent of vein yet unexplored afforded the fairest opening for new works, entered into a contract with the proprietors, to whom he paid 130,000 dollars on the part of the Company, for the transfer of the negotiation. He likewise took fixtures and property to the amount of 207,000 dollars more, to be paid by quarterly instalments in three years; but a part of this property consisted of "tortas," and ores already in the Hacienda, which might, consequently, be regarded as silver.

The reforms contemplated by Captain Vetch met with considerable opposition amongst the native miners; and although the Company took possession of the mines in April 1826, in December the expences still exceeded the value of the silver raised. Eleven thousand dollars were coined weekly, but the charges were nearly twelve; the underground work alone averaging seven thousand dollars, and the costs of the Hacienda five. From eighty-five to

ninety-five "campos" (pairs) of barreteros (common miners) were in daily employ; and the number of "cargas" of ore reduced varied from fifteen hundred to two thousand in the week, which yielded, upon an average, thirty-five or thirty-six ounces of silver per "monton," of twenty quintals. Within a short time after my visit, Captain Vetch succeeded in carrying all his plans into execution, and in June and July, 1827, a weekly profit of 3,000 dollars was the result.

The Bolanos Company possesses a magnificent Hacienda, (La Saūcĕdă,) built by La Borde, and purchased by the Fagoagas of his family, when the mine of San Acasio was abandoned. It contains seventy-four ărrāstres (called in Zacatecas, tăhonăs), with furnaces for smelting, a very perfect lavadero, (assemblage of washing vats,) and a patio (amalgamation court,) capable of containing twenty-four "tortas," of sixty "montones" each. The process is conducted nearly in the same manner as at Guanajuato, with the exception of the "molienda" (the process of grinding), which is more rapid, and less fine; each "tahoana" in Zacatecas grinding ten arrobas of ore in sixteen hours, in lieu of six arrobas in twenty-four hours, which is the maximum at Guanajuato.

There are seven "morteros" (stamps) at La Sauceda, it being calculated that one mortero will keep twelve arrastres in constant work. Salt and magistral are abundant and cheap. The latter is brought