

SECTION III.

WHETHER THE LARGE CAPITALS WHICH HAVE BEEN REMITTED TO MEXICO, AND INVESTED IN THE MINES BY BRITISH SUBJECTS, AND ON BRITISH ACCOUNT, ARE LIKELY TO BE PRODUCTIVE OF ADEQUATE RETURNS TO THE ADVENTURERS; AND WITHIN WHAT PERIOD IT MAY REASONABLY BE EXPECTED THAT THESE RETURNS WILL BECOME SUFFICIENTLY CONSIDERABLE, TO MAKE THE GENERAL PRODUCE OF THE COUNTRY AGAIN EQUAL, OR ULTIMATELY EXCEED, THE ANNUAL AVERAGE AMOUNT DERIVED FROM THE MINES BEFORE 1810.

It will be seen that this Section embraces two distinct subjects of inquiry:—

1st. The returns likely to be made by the different Companies to the Adventurers engaged in them; and,

2ndly. The probability of the general produce of the country being so increased by these returns, (or by any other causes,) as to equal, or ultimately to exceed, the average annual produce before the year 1810.

With regard to the first of these points, I shall submit to my readers the opinions of such of the Directors of the different Companies as have ven-

ured to enter upon this part of the subject in their communications with me, (which some, from a very natural disinclination to commit themselves, did not,) and state, succinctly, in how far these opinions coincide with my own:—Upon the second point, I shall hazard a calculation myself, founded upon the general tenour of the information, which I have been labouring, during the last two years, to collect. I must, however, premise, that the data, upon which any such calculation must be founded, in the present state of Mexico, are too scanty to admit of the possibility of arriving at any exact result; while success, even where facts are not wanting to guide us in our investigations, and where every thing seems to indicate its probability, is always liable to be retarded by those causes, which I have pointed out in the preceding Section, as exercising a general influence upon the Mining Interests of New Spain, and, consequently, as more or less closely identified with the prospects of the present Adventurers.

No powers of machinery, for instance,—no exertions, or combinations of private ingenuity, could counterbalance the effects of several successive years of scarcity, or afford security amidst the desolation of a second Civil War.

The mines, at the same time that they are the great source of the prosperity of Mexico, are the first to feel any event by which that prosperity is menaced. Like the funds in Europe, they always indicate the approach of a storm; and require security,

as well as a concurrence of other favourable circumstances, in order to reach their natural level. Every calculation respecting them must, therefore, take as its basis the supposition, that public tranquillity will not be disturbed, nor the ordinary course of nature interrupted by any unusual visitation, (such as pestilence or famine,) with which the New World is occasionally afflicted. It is upon this supposition, that the gentlemen, of whose authority I shall presently avail myself, have proceeded in their communications with me; and it is upon a similar understanding alone, that I can venture, in justice to them, or to myself, to lay before my readers the result of our joint inquiries. I trust, however, that due weight will be given to this observation, and I shall consequently proceed, at once, with my task; not with a wish to encourage delusive hopes, but merely in order to show the nature of the expectations that may reasonably be entertained by those who have embarked so large a stake in the mines of New Spain.

Captain Vetch, the Director of the Real del Monte Mining Association, in a Report dated the 26th September, 1826, after stating the produce of the mines of Count Regla, during the fifty years in which they were in full activity, to have been Twenty-six millions and a half of dollars,* calculates that, by working the two great veins, (La Biscaina and Santa

* Average 530,000 dollars per annum.

Brigida,) at once, (which was never the case before,) the Company may expect to derive from them a yearly return of one million and a half of dollars:— He adds another million for the other mines belonging to the Company on the Veins of Mōrān, Ācōstā, Sān Estēvān, &c., in the same district; and at Pēchūgā, Zīmāpān, and Ōzūmātlān; and declares his expectation, “that the mines, in the course of the year 1827, will cover their own expences, and that, in 1828, the produce will be Two millions of dollars; fully equalling, if not surpassing, the annual average amount derived from them before the year 1810.”

In a second Report, dated 16th March, 1827, Captain Vetch confesses that delays have occurred in the completion of the preparatory works, which will, in all probability, render some farther advances on the part of the Company necessary during the year 1827; but he does not modify his opinion with regard to the prospects of the Adventurers in any other respect, and appears to consider success in the years 1828, and 1829, as certain.

The same gentleman, in his capacity of Director of the Bolaños Company, estimates the probable annual produce of the mines of Bolaños, after the year 1828, (the whole of which will be occupied with the drainage,) at two millions of dollars, (Report of 1st October, 1826;) and he adds in a subsequent Report, (of 16th March, 1827,) that he sees no reason to change his opinion either with regard to the mines, or the time at which they may be expected to be-

come productive, as he is borne out in all that he had stated in his former report, by the rapidity with which the works, by which the drainage is to be effected, were advancing towards their conclusion.

Without adopting implicitly these calculations, I am bound to state that they are made by a gentleman of undoubted ability, and that the works, by which they are to be realized, have been carried on by him with the greatest science and activity.

I confess, however, that Captain Vetch's expectations, with regard to Real del Monte, are more sanguine than my own, because his estimate of the probable produce considerably exceeds the average registered amount of former times.

He, however, justifies his calculation, with regard to the Biscaina vein, (the most important of all,) by stating that it is founded upon the produce of its best years, (from 1794 to 1801,) when it yielded six millions of dollars; and that it is not assuming too much to say that, with improved machinery, and an improved system of working, it may again be brought to the same standard, as soon as the deeper levels are reached; in which it is universally admitted that the richest ores were found, although, from the difficulty of keeping them free from water without steam-engines, they were ultimately abandoned.

Should these expectations be realized, and the produce of the year 1829 amount to Two millions of dollars, deducting one million for the expence of keeping up the establishment, the whole outlay of

the Company, (400,000*l.*.) would be repaid in 1830; after which period, they would, as long as the mines continued to yield ores in the same ratio, after dividing the profits with the proprietor, receive an interest of 750,000 dollars, (or about thirty-four per cent.) upon a nominal capital, of the use of which they would have been deprived for only five years.

Reduce these profits to twenty-five, or twenty per cent., during the term for which the mines are contracted, and they will still be enormous; although not at all equal to those which Captain Vetch expects to derive from Bolaños, where, by the investment of 150,000*l.*, (or 750,000 dollars,) commencing in the year 1826, he looks for a produce of Two millions of dollars in the year 1829.

This estimate is a fair one, as it does not exceed one half of the produce of some former years, before the expence of the drainage compelled the proprietors to abandon the deepest levels.*

Half the sum, (supposing the other half to be absorbed by the expences,) would repay the whole capital invested, in the year 1829; and leave one million of dollars annually, to be divided by the proprietors in every subsequent year; so that the profits of the Company, as long as the mines continued to be productive, would be equivalent to two-thirds of their whole original expenditure, or something more than sixty-six per cent.

* *Vide* Table of Produce, No. 1, at the end of this Section.

Under such circumstances, loss, at all events, either of capital, or of a return upon it, much exceeding any ordinary interest, can hardly be apprehended; for, although mining cannot be subjected to fixed calculations, it is a fact universally admitted in Mexico, that the chances of loss diminish, in proportion to the extent of the operations carried on; and that, although many a poor miner has lost his little all upon one ill-chosen spot, few instances have occurred, in which a district of known richness has disappointed the hopes of those who have possessed the means of exploring it in every part.

The Report of Mr. Williamson, Director of the Anglo-Mexican Association, (dated June 1826,) after stating the progress made, and the probability of concluding the drainage of the Valenciana mine in eighteen months, proceeds to give the average annual produce of Guanajuato before 1810,* which appears to have been, on a term of fifteen years, 5,572,206 dollars; two-thirds of which, or 3,714,804 dollars, actually proceeded from the mines now working by the Company.

Mr. Williamson expects, that in two years, (*i. e.* in 1829,) he shall be enabled to bring the produce of the mines again to this standard; nor do I see any reason to question the possibility of his doing so, now that the reductions mentioned in the pre-

* Vide Table, No. 7, annexed to preceding Section.

ceding Section have placed the establishment on a footing, at once economical and effective. He deducts one-half of the produce for expences, which leaves 1,857,402 dollars, to repay the Adventurers for their advances, which is to be done before any division of profits with the Mexican proprietors takes place, and might, consequently, be effected in four years from the present time; (the outlay being three and a half millions, and the mines covering now their own expences :) and he then takes half that sum again, (or 928,701 dollars,) as the interest to be paid, or rather the profits to be derived from the speculation during the duration of the contracts, if the mines do not prove totally unworthy of their former reputation.

This calculation, like all others upon the same subject, is open to objections. Delays may occur, and the most reasonable hopes may be disappointed; but it has for its basis the records of what has been, and it assumes nothing but the possibility of restoring things to what they were, before a great political convulsion compelled the owners of the most flourishing mines to abandon their works.

To the activity and judgment which were displayed, at the time of my visit to Guanajuato, in the operations by which the result, to which Mr. Williamson looks, was to be produced, I can myself bear witness; and, in the opinion of the natives, such was the progress already made, that a Barr, or share, in the Valenciana, which, in 1825, was not

valued at more than 30,000 dollars, was, in 1826, reckoned worth 100,000.

I may add, that from August 1826, up to the time of my departure from Mexico, (May 1827,) the mines covered their own expences; and that, during the month of March alone, (1827,) the silver reduced in the Haciendas of the Company amounted to 54,964 dollars.*

The want of Records of former produce has prevented Mr. de Rivafinoli, the Director of the Tlalpujahua Company, from hazarding any calculation, as to the probable amount of the produce of the mines belonging to that Association.

He stated, however, in a Report, dated September 1826, that, from the 1st of January 1827, he expected to be enabled to cover his expences, and to pay an interest of ten per cent. upon the capital invested, which only amounted then to 160,000/.

These hopes have not been realized up to the present moment, accidental delays having occurred, as in every other Association; but, from the forward state of all the preparatory works, the admirable system which has been introduced at Tlalpujahua, and the great promise of some of the ores that have been raised, I am inclined to think that the year 1828 will not elapse without Mr. Riva-

* I have no returns of the former produce of any of the mines worked by the Anglo-Mexican Association, with the exception of the Valenciana, which will be found in Tables Nos. 2 and 3.

finoli's expectations being fulfilled; while I see great reason to hope that, during the two subsequent years of 1829 and 1830, a large portion of the capital invested will be repaid.

The Directors of the "Mexican Mining Company," having neither given to the world a statement of the amount of the capital laid out by them, nor published any documents with regard to the former produce of their mines, I can make no calculation whatever as to the amount which may be expected to be derived from them. The Directors, however, stated, in their communications with me, that, both at Sumoloacan, (near Perote,) and in Oaxaca, the mines actually working by the Company were in full produce: that, at the first place, they considered the quantity of ore on hand as fully equal to the expenditure; and that, although this was not yet the case in Oaxaca, the mines there had yielded, up to the end of December 1826, twenty-six bars of Silver, worth, (including a small Ley de Oro) about 30,000 dollars.

The disorganization of the Catorce Company, occasioned by the failure of the House of Goldschmidt, prevented their Directors from favouring me with any report. I was, however, enabled to ascertain, during my journey North, that their outlay at Catorce did not exceed from Thirty to Forty thousand pounds. Fifty thousand pounds more are required, and two years' time, to complete the principal work which they have undertaken there;

but, if they can raise funds to carry it on, there is no mining enterprise in the country of which the Mexicans have so high an opinion; and I should myself be inclined to estimate their probable profits, for some years, at from sixty to seventy per cent. upon their advances.

The former produce of Catorce, during its best years was 2,854,000 dollars, (the average on five years, from 1800 to 1804). The mines from which by far the largest proportion of this sum proceeded, are now unworked, and must remain so, until the great Adit, the contract for which the Catorce Company has taken up, be concluded.

There is, however, every probability that, if carried on, the annual produce would equal that of the most flourishing periods before the Revolution; the riches of the vein having continued undiminished, at the time when the increase of the water obliged the proprietors to abandon the works.

Mr. Alaman, the principal director of the United Mexican Company, in a Report full of curious information, which he had the goodness to draw up for me, declined hazarding any positive calculation as to the probable amount of the produce of the mines worked by that Association, "because, (to use his own words,) "the produce of a mine could never be said to bear any exact proportion to the capital invested in it; sometimes exceeding all reasonable expectations, and at others, falling short of the most moderate estimate, particularly when confined to any given time."

Mr. Alaman stated, however, that "as the large capital of the Company enabled it to work a number of districts at one and the same time, the probability of great profits increased in proportion to the number of mines capable of producing them:" and he adds, "that, if the past can be taken as a criterion for the future, *many* of the mines worked by the United Mexican Association, (as El Pavellon, at Sombrerete; San Bernabé, or San Acasio, at Zacatecas, and Rayas, at Guanajuato,) were capable of covering, in a very few years, the whole outlay of the Adventurers;" (although that outlay amounted, at the close of 1827, to 800,000*l.*;) "without reckoning many other mines, in the possession of the Company, celebrated for their former riches, or the new mines of Sēchō and Lōrētō, which had already repaid the advances made upon them, and were producing profits."

In another part of his report, Mr. Alaman stated, that in almost all the districts the preparatory works were nearly concluded; and that, with the exception of the two great mines of Rayas and San Acasio, in the course of the present year, (1828,) all the mines of the Company would be in full produce. For the two exceptions, he fixed, as the maximum of time required, the autumn of 1828, so that in 1829 the Adventurers may hope to reap the full fruits of their present advances.

If my faith can be placed in Mining calculations at all, these fruits must be very considerable; for the United Mexican Company possesses, perhaps, a

larger portion than any other, of the mines most celebrated for their former riches, and that on terms sufficiently equitable. I, therefore, rate their prospects high. But, at the same time, it must be confessed, that the vast extent of their undertakings is a disadvantage, from the impossibility of enforcing uniformity of system in operations, which are spread over 800 leagues of country, (from Jesus Maria, North-west of Chihuahua, to Teojomulco, in Oaxaca,) and that, consequently, there is reason to fear that the difficulties of management will tend, whatever be the exertions of the directors, considerably to diminish the profits.

It would be folly in me to attempt to fix what Mr. Alaman has declared his inability to do,—the period at which the Company may look for the repayment of its advances; but should any one of their great undertakings succeed, (and it is difficult for the most desponding to suppose them all failures,) that period cannot be more distant than that fixed by the Directors of other Companies—viz. the year 1831 or 1832.

The Report with which the Directors of the German Company were so obliging as to furnish me, contains many interesting facts, some of which tend not a little to confirm the opinion, which I have expressed in the preceding Section, that, had the attention of the British public not been exclusively directed to the mines which came recommended by Baron Humboldt's authority, capital might have been, in

many instances, invested more profitably, in mines of less celebrity, but easier of access, than some of those which have been selected by the English Companies.

Not one of the German mines is known in England; for *Ärēvälö*, the most important one amongst them, (at Chico,) was discovered after Humboldt's visit to Mexico; yet the Germans, by a judicious selection, made upon the spot, by miners of great experience, and activity, have done more, (in proportion,) in less time, and with a smaller capital, than any of the Foreign Companies established in New Spain.

By the statement of the Directors, it appears that they commenced their operations in the Autumn of 1825; and that, at the end of December 1826, they had drawn from the very small proportion of mines, which they had been able, at that time, to bring into work, a sum nearly equal to one-fourth of the capital employed.

The whole outlay of the Company, including the transport of the directors and officers from Germany, amounted to 637,760 dollars; while the produce was 147,153 dollars: a result sufficiently favourable to render any farther calculations as to the ultimate success of the Company unnecessary. That success, however, will not be so rapid as might be expected, unless the capital of the Association (originally 500,000 dollars) be increased, so as to enable its agents to bring the mines taken up by