

or a peasant engaged in his agricultural pursuits, without his having his gun and rusty old spear swinging to the side of his half-starved animal. I would impress upon the minds of my readers that there are no unarmed citizens in Mexico—it matters not when or where you find the man, in his house, in the street, or on the highway, although he may be needy for food or raiment, yet you will see an implement of death in his hands, for the double purpose of attack and defence.

As a people, the more polished circles of society, as also the lower classes, possess decorum and finished manners, and in their guileless aspect, and professions of punctilious performances, the stranger, in the contemplation of the Mexicans, has much to admire—yet, at the same time, if his confidence should be won in them, he will often find himself the dupe of the basest treachery.

True, there should and must be some good, honest, and high-minded citizens in Mexico; yet, so difficult are they to be found, and so few the number known to the world, that they are not sufficient to give a respectable character to society. It is a fact that perfection cannot be found anywhere, and some wicked persons are to be met with in every community; yet it is monstrous when the great majority of the inhabitants of a country are swindlers, thieves, and murderers, in an unqualified manner, as is the case in Mexico; it must be with shame and remorse that Christianity and civilization, in the enlightened world, are compelled to denounce them as a nation of pirates.

It is needless to garble the truth, for covering the iniquities of these people in any form, is but encouraging them in the perverseness of their ways, and deluding the credulity of those who are earnest seekers after information, some perhaps for future interested motives. Far be it from me to beguile a foreigner into the serious difficulties and dangers which must follow the travelling and residing of any one in Mexico.

Never could have I comprehended the correctness of Mr. Randolph's declaration, upon the floor of Congress, that, in Mexico, "the men were all rogues, and the women all \*\*\*\*," and have been impressed with the great error and responsibility of the government of the United States, when she received that country into the family of nations, until chance and necessity obliged me to visit Mexico, and when there I was compelled to believe ocular demonstration. I have the boldness fearlessly to charge home the disgrace of their national character, with the sincere desire that it may be but as a drop in the bucket, to chastise our sister republic into reform.

The government of Mexico, in 1842, made some efforts to

break down the universal practice of wearing arms, by Santa Anna's issuing a decree that none, excepting gentleman of character above suspicion, should be permitted licence to have private arms; yet the decree failed to correct the evil, for the good citizens all believed that they came up to the requirements of the law; besides, the keepers of the custom-houses would have been foiled in securing their fees had they enforced the intentions of the decree. Therefore the robber, as well as the honest man, alike, as formerly, carried weapons.

### CHAPTER XIII.

Del Refugio. Flock of sheep. The hacienda Paras. Ascending the Plain. The Mexicans in the fields. Vein of silver on the surface. Abundance of silver ore. Laws of Mexico on Mining. The principal vein of silver. The appearance of the range of Mountains. A large Convent. High wall. Don Garcear's granary. Battle-ground. General Andrade Santa Anna. Colonel Harcourt's defeat of the Zacatecans. Santa Anna flushed with pride. Conquest of the United States and Texas. Napoleon of America. First view of Zacatecas. The streets. Meson. The American my interpreter. An Irish gentlemen. Many public buildings. La Parroquia Convento de Muestro Senora del Petrocenis. The Saint. Location of the resident Saint. Subject of divinity. Government Palace. Spanish Marquis. Child christened. The Mint of Zacatecas. Mr. John Scott. Mexican horse. Hacienda de Beneficio Santa Clement. Cultivated gardens. Water from the Mines. Bags of hides. Ropes of hide. Shafts of the Mines. The ore-yards. Labourers. Captains. Specimens of silver ore. Native silver. Reflections. The eminence of Santa Clement. Mountain and Valley Scenery. Machine for pulverizing ore. One thousand bushels of ore. Washing the ore. Examinations of the labourers. Thefts. The blackleg.

DURING our day's journey we had to pass Del Refugio, a hacienda said to be of considerable value. I was informed that the present possessor is not its proper owner, but that, upon the demise of its proprietor, in *fee simple*, the creditors of the deceased disagreed about the sale of the estate, and the limb of the law who had been appointed curator of the property, having the possession, chose to retain it in defiance of the just claims of the creditors.

At Del Refugio I saw a herd of sheep that must have numbered several thousands, and, as they extended over the plain,

they looked like a vast moving body of snow. I wish to impress the mind of the reader that, as the traveller advances north, and approaches one of these valuable estates, he will behold immense herds of stock of all kinds; and, as a test of the truth of my assertion, I will only cite the history of a hacienda which a few years ago caused some litigation in the city of London, England.

The hacienda Paras, signifying a vine, was the only estate in Mexico where the grape was permitted to be cultivated by the king of Spain. It was, previous to the revolution, the property of a Spanish nobleman, but after the independence of Mexico, he sold it to a Spanish house in the city of Mexico, and then it was resold to the house of Staples & Co., of the same city. The Barings, of London, afterwards became the purchasers, but were prevented from holding the property by the Deputies of Mexico passing a law preventing foreigners from buying or selling lands in that country; and it is said that the speculations of the Paras hacienda gave origin to the passage of the act. This estate, I was credibly informed, besides the extensive vineyards, producing many thousand gallons of wines and alcoholic liquors, possessed, when the Barings purchased it, upwards of three hundred thousand head of sheep, with a corresponding proportion of other stock.

As we gradually ascended the plain to the mountains of Zacatecas, we were exposed to a heavy cold wind, that swept over the face of the earth, unimpeded by forest. I was sometimes diverted by the Mexicans in the fields, whose loose serapis would, by the violence of the winds, float from their shoulders like the wings of so many *sopilotes*, buzzards, as if the natives would be flown away with.

At about three o'clock in the evening, my American companion pointed out to me the rich mountains of Zacatecas, in a deep gorge of which was built the city of the same name. The American had, during his residence in Mexico, been engaged in mining at that place, and could therefore, from his perfect acquaintance with it, minutely trace out, for my understanding, a vein of silver ore, the only instance of the kind known in the world, which rose to the surface of the plain, and with precision follow its ascent up the mountain, and describe the visible walls and buildings, where shafts had been sunk upon the vein and its branches.

I was much surprised when I perceived that the veins of silver ore were perceptible upon the surface, for I had imagined that the treasures of nature lay buried deep beneath mother earth and the mountain-rock, obscured from all anxious eyes, as does the rich man's money in his hidden coffer. But not

so with bountiful nature at Zacatecas, for she has, with the finger of her plentiful hand, plainly marked out the useful ore to the view of man, so that he cannot be foiled, or unrewarded in his labours in excavating the precious metals.

The laws of Mexico bountifully provide for the miners, as it is the privilege of any one to search for ores, and to work the veins when found, as his exclusive prerogative. When an individual has made a discovery of rich ore, it is his duty to survey a given number of acres of land, for the use and benefit of the mine, and have the same recorded in the office of the *alcalde*. He must then commence to work it in ten day's time, with a particular number of hands, and, at stated periods, increase his expenditures to an amount limited by law. The discoverer, failing to comply with the requisitions, forfeits all claim and title to the property, and may be ousted by the will of any other occupant who can punctiliously perform the demands of government. The proprietor of the land on which the discovery has been made, is always pleased at the location of mining-operations upon his territories, for it brings to his doors a ready market for all the surplus of his hacienda campus. Being contented with the profits of his grain and stock sold to the operators of the mine, he has hazarded nothing in the uncertain results of opening and proving it; and besides, wherever a shaft is sunk, there is also a town erected, which likewise affords a speculation in lots, to the original proprietor of the soil.

The principal vein of silver ore at Zacatecas, which first shows itself in the plain, ascends the nearest mountain, and is discovered about midway, where a shaft has been sunk to a great depth, but is not now worked. The vein then descends over the side of the mountain, and, after crossing the next ravine, suddenly ascends to the top of the next cone-shaped peak, and so on, ascending and descending, until it dips under the city, and again rises to the top of a high peak, immediately to the north, overlooking Zacatecas.

The appearances of the range of mountains, upon which are the veins of ore, are like all others in the interior of Mexico. They are almost deserted by vegetable growth of any kind; for, the small amount of soil on those heights, generally, only produces a thorny scrubby growth, that makes but a thin appearance in places. The silver mountains of Zacatecas, to my view, had something of a peculiar appearance, for they seemed to have been thrown up more abruptly, with a greater number of cones, having nipples crowning their summits. They appeared to have contained more of the native red rock of the country than any other mountains that I had beheld. I was

informed that, in mountains where silver was most prolific, the rock chiefly abounded in porphyry, green and red stone.

But to return—as I approached the mountain, a large convent was exposed to my view, which was a present to the order of Grey Friars, by the owner of one of the mines. It was surrounded by the village of Guadalupe, which had a romantic aspect, situated just at the foot of the mountain, and commanding the pass, where I was directed the road to Zacatecas. Every town of any consequence in Mexico, has its pueblo of Guadalupe, erected in honour of the patron saint of the country.

Between the road and the village, I perceived a high wall enclosing a large plot of ground, which I supposed to be a fortification; but my friend informed me that it was a granary belonging to Senor Don Garciar. Such granaries were not common, but had been invented and built by him, to prevent insects from injuring his grain; his speculations in that article having been extensive; by one of which, it is said he made above a hundred thousand dollars by one purchase.

The plan he adopted to preserve grain for any given time, was to build houses within the enclosure, to cover the corn, of round and cone-like form. The houses were about twenty feet in diameter at the base, but built to a point at the top. They resembled an old Virginia fodder-stack more than any thing else. When these houses are tightly stuccoed and filled with grain, the door is built up and plastered over, by which process the light, moisture and atmosphere are excluded, and the grain for ever preserved harmless from insects.

After passing the granary, my friend informed me that we had entered upon the battle-ground, where Santa Anna defeated the Zacatecas in 1833, who were the last troops to hold out against him, when he usurped the government from the constitutional president Bustamente. The field was a dead level, and about one mile wide, confined between mountains. Previous to the advance of the conqueror, the governor of Zacatecas was desirous of obtaining some general of experience to command his forces, and in time General Andrade, who had ever been an adherent of Santa Anna, suddenly became disaffected towards his former master, and espoused the cause of the Zacatecas. The unsuspecting governor, rejoiced at the fortunate accession, appointed him commander-in-chief of all his forces.

It was not long after General Andrade had been acting under his appointment before he marched his army, consisting of about five thousand men, from behind the bulwarks which had been thrown up on each side of the mountains that commanded the

pass to the city, and which, if defended, would have resisted any enemy that might march against it. But the general, true to his secret purpose, for there is honour among thieves, made his encampment on the plain between Guadalupe and the granary, and his antagonist soon *bivouaced* in sight of him.

General Andrade, in a few days thereafter, commanded his horsemen, who constituted one half of his army, to carry their horses to a distance from the camp, that they might have one good night's grazing, and also directed that the artillery and infantry should not sleep on their arms that night, as he had no fears of Santa Anna attacking them. The whole army, fatigued with service, willingly obeyed the lenient orders of their general, with the exception of Colonel Harcourt, a German by birth and education, who had the command of the Zacatecan artillery. He alone determined to be upon the alert, and, accordingly, before the dawn of day, Santa Anna had skirted the plain at the foot of the mountain, by which well-timed movement he had thrown himself to the rear of General Andrade, and thus cut off the retreat of the Zacatecas from their strong-hold in the mountain.

No sooner had Santa Anna obtained this position, without alarming his fellow-countrymen and enemies, than he commenced a heavy fire upon them, and while all were in confusion at the surprise, the brave and watchful Colonel Harcourt rallied his men, and returned the volley of the enemy; and, could he have been sustained by the infantry, who were without horses, the triumphant Santa Anna must have been overthrown; for the colonel had driven him back, with the loss of three hundred killed and wounded on the field. As it was, however, he surrendered, with his whole army, to the power of superior numbers.

The inglorious commander of the achieved victory, having secured his prisoners, issued a command that all foreigners, belonging to the Zacatecan army, should be shot on the spot. Be it also recorded, to the glory and honour of the Mexican officers, under the barbarous commander, that they remonstrated against the order, and saved the lives of many brave men. The shameful decree of Santa Anna being reversed, and the prisoners marched to the city of Mexico, the gallant Harcourt obtained his liberty, and in disgust retired to Texas, where he died a natural death, with glory and honour untarnished.

Santa Anna, flushed with pride at having obtained so important a victory, immediately determined, contrary to the earnest solicitations of many of his advisers, to attempt the conquest of Texas, and, with a vanity far beyond his powers

of execution, declared that he would not only retake Texas, but, with his army of ten thousand men, it was his intention to march to the city of Washington, and be the Napoleon of America. A gentleman of Zacatecas informed me that he was present, and heard the boasted vaunt of the American Napoleon, and so indelible had the glorious appellation been imprinted on his mind, that he was again heard to make a similar expression to General Houston, after the battle of San Jacinto.

From Zacatecas the victorious army was marched to the province of Texas, whence the annals of history never before recorded so complete an overthrow of a general with well-trained troops. I do not accuse Santa Anna of a want of intelligence, but on the contrary believe him to possess respectable talents; for no man could at will usurp the government of a nation, without some strength of mind. By his superior intellect, and thorough knowledge of his countrymen, he has never failed, by the happening of events, to ride in the whirlwind and direct the storm, in the affairs of his imbecile government.

He cannot be commended for his ambition, which has impoverished the coffers of his country, and at the dear price of the blood of thousands of his fellow-countrymen. His passions are power and avarice, and to satiate his appetites, the one is maddened with the hope of gain, while the other is driven to desperation by the desire of supremacy. Mexico exhibits the remarkable anomaly of a ruler who holds the reins of government ostensibly—though not by the will of the people: yet, for all the sins of which he may have been guilty, the world will forgive him, if he will make his people honest and industrious, by doing which, he will emulate the character of, and denominated by all the good of the earth, the great Czar, the Peter the Great of Mexico.

My first view of the city of Zacatecas was the most peculiar I ever had of any other place. My attention was first called to the scene, in perspective, through the narrow gorge of the mountains. The city contains about twenty-five thousand inhabitants. The streets are all well paved, and, from their being uneven and hilly, have a cleanly appearance. As the location of the town is over, and surrounded by, mines of silver, the wealthy proprietors have, in many instances, lavished their money upon large and highly-finished buildings, after the fashion of the country. My American companion and myself put up at De la Calde Tacuba Meson, and what rendered me well satisfied with the place was, that it was superintended by an Italian cook, who could speak English.

It was my intention to remain no longer in Zacatecas than I could make all my necessary arrangements for some future point in my long journey. My friend proving, to my mind, to be so very intelligent and well acquainted in Mexico, I did not hesitate to engage him as my interpreter and my assistant in business, as far as Caneles, and I was superinduced to close a contract with him, for the reason that he stated, that he was destined for that place. I therefore determined that, as perhaps I should not meet with another so fortunate an opportunity of employing an interpreter, I would not let the chance escape me.

The American promised promptness in securing all my equipments, and a speedy departure, and confiding in him, I employed my time in obtaining information, and indulging in the pleasures of the city, besides resting from travel. An Irish gentleman I became acquainted with in the city of Mexico, and who had resided in that country for the last fifteen years, advised me, when I was about to depart for the upper departments, not to be thrown off a cautious guard by Europeans or Americans, any sooner than I would be by the natives; for that, in general, they were all alike, and I would suffer by the one as soon as the other,—yet it was absolutely necessary that I should have an interpreter, and a choice must be made, let it prove good, bad, or indifferent, and I abide the consequences.

There are many public buildings in Zacatecas, of large dimensions and costly workmanship. The church of La Parroquia is nearly the size of the great Cathedral of the city of Mexico. The entire wall of the building is sculptured with the history of Christ and the apostles. On the church is a cupola built of the red stone of the country, which presents much architectural beauty; there is also another in an unfinished state. The edifice was originally designed for a cathedral, but as that intention was vetoed, it was never completed, as no house of worship can have two steeples, unless it is a Bishopric.

The Convento de Nuestra Señora del Patrocinio, has its situation upon the pinnacle of a mountain, overlooking the whole city. This convent is a small religious edifice, and the peculiar residence of the patron saint of the city. She however condescends to make an annual visit to her favourite people, and for the better purpose of investigating the affairs of the churches, puts up at each for the space of one week.—After having taken her celestial round, and received the hospitality of the city, she then, in the same manner in which she descended, is marshalled back to her elevated home, followed

by a large portion of saints and sinners, who, as they move forward under triumphal arches of evergreens, have the blood red banner of the cross waved over them, amid the playing of music and the firing of rockets and cannon. Having taken adieu of her rejoicing flock, she remotely, though in sight, quietly resides on the top of the mountain, as the guardian angel of the public weal, there to remain until the following year, when the same anniversary festivity is to be celebrated.

There was no place of any consequence through which I passed, but what had its convent dedicated to the patron saint of the inhabitants. The location of the building is on the highest elevation overlooking the town, and the resident saints make their annual visit to their chosen people in the manner above described.

There was one thing, however, that very much perplexed me, which was, to understand who were those divine personages, for every one had her separate name, and peculiarly partial superintendence of the souls of the inhabitants of each town, while, at the same time, they were undivided and indivisible, of the same person of the Holy Virgin Mary, Mother of Christ. I must confess that I am wanting in a sufficient knowledge of divinity, to understand what seems to me to be an incongruity; and I have only mentioned the fact for the benefit of those who might better comprehend the subject than myself, or feel curious about an intricate subject of this nature.

There are many other churches in Zacatecas, yet I did not think it important to ascertain their number. There are several Jesuit buildings used as garrisons for soldiers. One of these on the south side of the city, the bricks of which were made of the earth of a grave-yard; and where the walls had not been plastered, or had fallen down, the bones and ashes of the dead were all mixed up in the common mortar of the bricks. To satisfy myself whether this were so, I visited the house, and indeed there were, besides human bones, what apparently were fragments of clothing of all ages, visible on the walls, and, in the exhibition, I never was so forcibly reminded of the Latin maxim as then, "*Sic transit gloria mundi.*"

The government palace fronts on the south side of the Plaza, and is the largest of all the dwelling houses. It was originally built and owned by a Spanish nobleman, who, after the revolution, sold it to the city for the residence of the governor. I was informed that when the foundation of the church was laid, designed for a cathedral, it was to have fronted the Plaza, but agreeable to that intention, the church would have obstructed the view of that place from the palace

of the nobleman, and to prevent its location there, the nobleman made a donation of one hundred thousand dollars towards defraying the expenses of erecting the building, provided that the church should be so altered, as not to obstruct the view from the palace of the Plaza.

During my stay in Zacatecas, it became necessary to make excavations in the Plaza, for the laying of pipes to the water fountain, which caused the original foundations of the church to be exposed, and the citizens flocked to behold it. But the Mexicans must have remembered that the days of the marquis had passed away, and that, although the mines of the mountains are yielding millions, the people are poor, for there are no such men as the Spaniards amongst them. A Mexican gentleman informed me that the general condition of the citizens had never recovered from the plundering of the city in 1833, by Santa Anna, at which time he likewise confiscated the mining estate of one of her most wealthy inhabitants.—But a day of retribution may come, and the author of so much calamity to his fellow-countrymen may yet be overwhelmed.\* I was informed that this celebrated nobleman, (whose name I regret to have lost,) when he had his child christened, had bars of silver laid from his palace to the altar of the church of the convent of San Francisco, for the priest to walk upon.

At the mint of Zacatecas I met with Mr. John Scott, an Englishman, who, in his own country, had followed civil engineering, and had been sent out by an English mining company to that city, to investigate and improve the mode of mining, and the machinery for the coining of money. Mr. Scott and myself came in contact at Jalapa, and travelled from there to the city of Mexico; during his stay there, we messed at the same table. He was not only a polished gentleman, but had also a spirit of accommodation, and seemed to take a pleasure in explaining to me the utility of the machinery in the mint, and giving all other information occurring to his mind at the time, or answering my inquiries. The mint at Zacatecas is said to coin from five to eight millions of specie per annum.

The post-office and the custom-house are substantial buildings, well adapted for their purposes. There is but one college here, called the Zacatecas Literary Institute. It is not remarkable for its elegance or workmanship, yet it is sufficiently commodious to accommodate one hundred students.

On the 24th instant, I found myself mounted on a real

\* Santa Anna, since the above was written, has been deposed, but time will have to develop his ultimate fate. It is the impression of myself that he will yet be again the Dictator of Mexico.

Mexican small-pacing horse, completely equipped with all the paraphernalia of the style of the country, consisting of a Spanish saddle and bridle, the indispensable long rapier, holsters with pistols, and lasso. I am indebted to the obliging Englishman, Mr. Scott, for the kindness he extended towards me, in showing me through the mines of Saint Clemente and Saint Nicholas. The attention on his part was very acceptable, for these were the most productive of any others in complete operation at Zacatecas. The pleasure I enjoyed in visiting the fountain-heads of the wealth of the world, the glorious prospect before me, was divided in the anticipation of the first experiment I was about to make upon a Spanish saddle and a Mexican horse; and in truth, although to witness the disemboweling of tons of the precious metals, so dear to the pursuits and wants of mankind, was an opportunity I would have regretted not to have embraced, yet I must confess the prospect of the ride predominated; for at the one I only had to gape and wonder at the vast amount of silver belonging to others, while in the other I was actually to receive the benefit of a short jaunt upon the most delightful of all the going animals ever subjected to the dominion of human beings; and I was not disappointed when my friend invited me to depart, and we had entered the street, to mount what an Englishman calls his "cattle," the gay, fiery, low-quartered, middling-sized Mexican horse, for they are all such in comparison with the American animal. My little steed pricked forward his ears, pawed the pavement, and shot at me his fiery eyes, as if he had mistaken me for a Texian; but I was soon in the saddle, and so far from finding him ill-natured, his whole action seemed to demonstrate the delight he took in holding me between heaven and earth, and apparently discovering me to be a stranger, conformed to my ways upon the slightest motion. Upon my first acquaintance, and all my after use of the Mexican pony, I found him to possess remarkable instinctive faculties. A stranger to him is at first liable to mistake his native playfulness and sprightliness for the wild fright and ill-nature belonging to the English and American horses.

The Mexican horse is a descendant of the barbed animals brought from Spain. He is more hardy than any other horse in my knowledge; is obliged from his youth to maturity, to make his own living, and never knows what it is to be fed on the luxury of grain, until his master has thrown the lasso over his neck, and mounts his back, armed with a pair of Spanish spurs, the rowels of which are from three to six inches in diameter, and the first impressions he receives from under the

tuition of his master, never fail to raise his feet above all impediment in the track before him, in an easy and nimble way, for he never stumbles. Our ride that evening was by no means over the plain, for no sooner than we had passed the precincts of the city, our direction lay immediately over a rugged and deep ravine of hard rock bottom, having a stream running down it, created by the water drawn out of the mines.

After having at a rapid rate travelled up a gorge for about one mile, we began to ascend the mountain, and then arrived at the Hacienda de Beneficio Mineral Santo Clemente. By the attachment of Mr. Scott to the Mint, we were accepted without delay at the gate, and having been first conducted to the office of the *administrador*, or governor, I was introduced to the officers of the mine, who were all Englishmen, one of whom conducted us to the shaft, which has two mouths one hundred yards deep. One of these was continually used, night and day, for drawing up ores in raw hide bags, holding about five hundred pounds each; while the other was worked in drawing up the water from the bottom of the mine. It astonished me to see the amount of water drawn up in this manner.

I was shown, on my way to Santa Clemente, a beautiful and highly cultivated garden, that received irrigation from the streams flowing from the mines, and was informed that so considerable was the quantity of water afforded by the mines of Friznillio, that it had changed the aspect of the face of the country, from thirst and barrenness, to that of blooming gardens, and extensive, highly cultivated fields, by only receiving the quantity drawn from the shafts of the mines. Water is the only thing the lands of Mexico need, and whenever they receive it, the soil is covered with abundant harvests of grain, and all verdancy covers most luxurantly the bosom of the earth.

Bags, made of new skins, are the most desirable for drawing up ore and water, for the reason that their own weight is comparatively nothing to what that of wooden ones would be, to answer a good purpose. Ropes, instead of chains, are used, also of raw hide, it being stronger than hemp or other fabric; they wind round a cylinder about twenty feet in diameter, propelled by the power of mules, as all the machinery of the mines and mint at Zacatecas is obliged to be, in consequence of the fact that the country about there both mountain and plain, is so entirely divested of wood that, if all the gold and silver produced was expended, it could not purchase fuel sufficient to propel steam power; the only fuel used in that section of country being charcoal, brought from considerable distances.

I much admired the employment of ropes manufactured of hide in that dry climate, and I observed that all manner of vehicles—the heavy road waggons, or the rich man's coach—are draughted by them, in the place of traces made of heavy leather, or of iron chains; besides, they have the reputation of being more durable and stronger. The traveller is never annoyed by the clank and rattling of so much metal as belongs to the English and American carriages.

From the shafts we were conducted into the ore-yard, an area of between two and three hundred feet square. This large yard was covered with piles of silver ore, each containing about three bushels, and I suppose there were at that time more than one hundred of those heaps. The piles were made of fragments of ore, as broken by a sledge-hammer off the larger pieces, when drawn from the shafts. At each of these heaps a Mexican labourer was seated on the ground, engaged in severing the large lumps into smaller ones, and I was really entertained by beholding the dexterity and facility with which the labourer would perform his task, securing by sleight a large piece of ore between his feet, and, with both hands hold of the helve of his hammer, lay upon it, until the rock was shivered into fragments. These men, as they progressed with their work, were also employed in separating the rich from the poor ores, which, from their long practice, they were enabled, most rapidly to do. Besides the labourers, there were men of superior talent, called captains, whose duty it was to re-examine the minerals, and, with more scrutiny, to collect the greater from the lesser in value.

The gentleman who was conducting Mr. Scott and myself over the hacienda, called for the chief captain to select a variety of specimens from the piles, so that I might the better understand the nature and kind of the different ores. The captain showed me a specimen of the iron pyrites, which one unacquainted with the ore, would imagine to be the most valuable of any of the lumps contained in the piles; for, as the beholder perceives the large veins of gray bright metal running through the rock, he is apt to mistake the sulphate of iron for the genuine silver. But, agreeable to the old adage, that "all that shines is not silver," so it is with the iron pyrites—for notwithstanding the specimen dazzles the eye by its superior glittering appearance, yet it contains less of the precious metal than any other specimens to be found. The sulphate of iron pyrites is often mistaken by the ignorant for gold. There was also some iron pyrites containing sulphurate of silver. Specimens of this kind are very brilliant and rich

in appearance, and indeed contain more silver than the simple iron pyrites.

The captain after a long search found a specimen of native silver, united with iron pyrites and sulphate of silver. This specimen was not only rich, but lovely to behold—for the native silver seemed to have blossomed in the shape of a rose, and ornamented itself with slight tendrils winding and curling most brightly and purely over the rich silvery resemblance of the flower; it looked to me more like the delicate art of the silversmith, than the work of nature. Another specimen of iron pyrites contained silver in a state of sulphurate. It had a beautiful aspect, looking as if it were a bright lump of silver unmixed, and was more valuable still than the simple iron pyrites, or those which contained sulphate of silver.

The captain then exhibited the native silver, attached not to reir stone, but to the rock peculiar to that country, for all of this valuable metal was pure, unalloyed silver. It existed in small wiry particles protruding out of the curling veins, or otherwise appeared to have blossomed out at once in bunches. The silver of one of these specimens had something of a yellowish tinge, which caused me to inquire if the silver of that mine contained gold, when I was informed that the proportion was so small that it was considered by the company not to be worth the separation. These specimens were contained in what the officer called slate-rock; but a gentleman, more scientific, told me that the proper appellation of it was green stone, the abundance of which covered the mountain in many places.

To conclude my description of the ores which I saw at the Hacienda Beneficio Mineral Santa Clement, I must say, that under the burning Mexican sun I had never before witnessed a more lively and desirable scene, or one more capable of producing a variety of pleasing reflections. To look down into the bowels of the earth, from whence issued deep, sonorous explosions of powder, followed by the distant hoarse, crashing, crushing sounds of the falling rocks, and then raise my head, and cast my eyes around me, and behold the apparent wasteful profusion of nature's wealth, made me ask myself—Why are there any suffering poor in the world? and my soul responded—Treasure up not the corruptible things of this earth, for the bliss of the happy cannot be purchased by silver and gold; but there is an all-perfect store, which, if secured in the high coffers of heaven, moth can never corrupt, nor thieves break through and steal; and all the riches I then beheld would, but for a few years only, serve to stimulate the appetites of the miner, the overreaching, the vicious and the

robber; and it is therefore, not only vanity, but ruinous to the true interests of the virtuous, to envy the possession of that which was only transitory, and can never satisfy; but it was calculated to expand the hopes of never-satiated desires, which were in their very nature perishable.

From the high eminence of Santa Clemente, I could look down upon the mountain-side, and the narrow valley beneath, without seeing a foot of soil in cultivation, excepting the green garden which I have mentioned, as watered by a silvery tide, flowing from a natural fountain of precious metal. And at thus beholding the vast expanse of the waste of the face of the earth, I could but reflect how much more valuable to animal creation would have been the amount of industry, expended in the mines, if it could have been applied to the neglected and fertile soil of the country.

From the ore-yard we were conducted to a new machine for pulverising the mineral. The fixture was propelled by water-power, and was supplied by a stream from the buckets that were hoisted up from the shaft. It looked to be precisely like all the powder-mills I have seen in the Union. There was, at a convenient distance, a pile of poor ore, which, I was informed, contained about one thousand bushels, and the machine was continually kept in motion, crushing from that bank. As the dust passed from under the crushers, it found its way to a long trough, through which flowed a constant stream of water, by which process the particles of metal sink to the bottom, and there remain, while at the same time the water flowed on, dusting its bed with the silver as it descended the mountain.

After we had been satisfied with all we examined, and were about to depart from the mine, I perceived a superintendent in a room near the large gate at the entry, running his hands through the hair of the heads, while his fingers passed in and around the ears of the workman who came to him for examination. At the first sight I thought I was about to be ushered into the presence of some learned doctor of phrenology, but I was soon undeceived by observing that no sooner had one fellow's head been examined than he doffed his serapi, showing the buff, and suffered himself to be searched all over, even to the bottom of his sandals, (for shoes are not allowed to be worn in the mines,) and not unfrequently bumps of secretiveness were found, which were always extracted, and never failed to be the richest native silver.

The workman, having undergone the scrutiny of the officer in the room as above described, was then dismissed, and, as he arrived at the gate, he there found another officer, standing

on a mat, who also gave him a minute search, which, when finished, the man was suffered to make his exit from within the walls of the mine. The officers who performed the task, when it was over, approached the English gentleman, who had attended us, and handed him the spoils taken in the search, and each of them had a handful of silver. I inquired how thefts in the mines were punished, and was informed that this treatment was not practised, for, that if it was, the company could not obtain hands to perform the labour, as the Mexicans do not consider it robbery to take ore. It is therefore the look-out of the officers to detect secretions of silver or gold, this being precisely the same principle adopted by the blackleg, that, as it is his business to cheat, it is that of the individual who plays with him to take care that he is not defrauded.

From Zacatecas I had an opportunity of writing, by a private conveyance, to my friends in Virginia, as Mr. Clement, an Englishman, who had been governor of a mining-company was going to give up his employment and take up his residence in the United States. Mr. C. had been prosperous, and was unwilling to educate his family in Mexico. Wherever he may reside he will make a most worthy citizen.