## Historical Data

CONCERNING THE

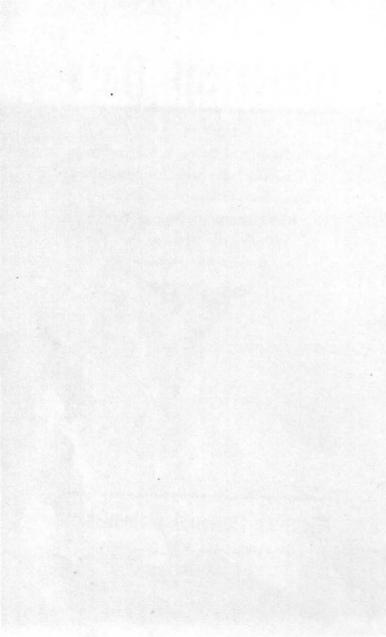
Mining District of Taxco de Alarcon, State
of Guerrero. Prepared by Order of a
Committee of Miners of said District, for the purpose of Exhibiting the same at the
St. Louis Exposition.



BIBLIOTECA

### Mexican National Commission

UNIVERSAL EXPOSITION ST. LOUIS, 1904



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I From the press of The White-Ebans-Penfold Co'y in Buffalo

#### Political Situation



CCORDING to the chart of organization of the Federal Government of Mexico, dated January 1, 1824, the Mexican nation adopted the popular

representative form of government, and declaration having been made through the above mentioned chart and by the Constitution of October 4 of the same year, with regard to the states in which the nation should be divided, the State of Mexico, comprising the wards and municipalities which formerly pertained to the "Provincia" (called also "Intendencia") of Mexico, was subdivided into districts, among which figured those of Taxco, Temascaltepec, Tetela del Rio, and Zacualpam. The area of the District of Taxco was at that time 1,143 square leagues, or 3,429 square miles.

By virtue of several decrees from the state in question various other wards were created, thus, at the beginning of the year 1833 the District of Taxco was formed by the wards Taxco, Teloloapam, (segregated from that of Zacualpam), Ajuchitlan, (formerly called Tetela del Rio), Zacualpam, Temascaltepec, Sultepec, and Tejupilco, (the two latter wards having been segregated from Temascaltepec), the District of Taxco remaining up to that time with the same area.

The above district having been divided into two districts by a decree of the State Legislature, dated May 24, 1833, thereby creating the District of Sultepec, Taxco retained the wards of Taxco, Teloloapan, and Ajuchitlam, with an area of 752 square leagues or 2,256 square miles, which is approximately twice the area of the segregated District of Sultepec, as well as that of the first mentioned ward. It was in this condition that the District of Taxco was made a part of the State of Guerrero, created by an Act of the National Congress, dated October 27, 1849, the ward of Ajuchitlan being then extended over the Municipality of Coyuca, formerly belonging to the State of Michoacan.

The territorial division of the State of Guerrero having been made by its internal organic law of March 16, 1850, each of the above mentioned wards, according to articles four and ninety of said law, were made a district of the state, thereby dividing the latter into three districts; i. e., Taxco, Teloloapam, and Ajuchitlan, with their respective municipalities, the former district comprising those of Taxco, Iguala, Tepecuacuilico, and Huitzuco. The area of Taxco, as may be seen hereinafter, was then 317 square leagues, or 951 square miles, which is approximately one-half of the area of the three wards that formerly constituted the District of Taxco when the state was organized. The first Constitutional Legislature of which, in its Act of March 12, 1850, gave the wards, called districts at present, the names of some of the heroes of Mexico, thus applying to Taxco the name of Hidalgo.

By a decree dated June 25, 1862, the incorporation of the Municipality of Tetipac, severed from Taxco, was recognized.

By a similar decision of the State Government, during the promulgation of the Plan of Ayutla, and according to the decree dated October 24, 1855, the head of the District of Taxco was transferred to the City of Iguala, therefore, the latter city became at that time the residence of its original authorities.

Through an act of the State Legislature, dated July 1, 1872, the Municipalities of Taxco and Tetipac were organized into a new district, which has since then been known under the name of "Taxco de Alarcon;" the same Legislature having passed a bill relating to the erection of a statute at the Town of Taxco, head of the District, to the memory of the distinguished poet and dramatist, born at that place, Don Juan Ruiz de Alarcon.

#### Geographical Situation and Climate

Taxco, according to Baron Humboldt, is situated at 18° 35' latitude north, and 101° 49' longitude west of the meridian of Paris, or 23' 30" west of the meridian of Mexico, since the latter city, according to the same author, is situated at 101° 25' 30" longitude west of Paris. There is some difference in the latitude marked by other travelers,

though the one stated has been given preference, which also appears in the tables of longitude prepared by other eminent authors.

The altitude above the level of the sea, is 1,783 meters or 5,849.72 feet, and the climate is temperate, dry, and mild; there are no severe winters or excessive heat in the summer, and the Baron of Humboldt, as well as other prominent travelers, have declared that Taxco has a healthy and delightful climate. From observations made it has been calculated that the maximum temperature in the summer is 26°, and that the minimum in the winter is 181/2° Réaumur, which shows a slight excess over the figures given by Humboldt, such difference being due, perhaps, to the felling of the adjacent forests; but the weather is generally uniform, therefore the change from one season to the other is hardly noticeable. It has been observed, however, that within the city proper, due perhaps to the difference of elevation, the temperature is not regular throughout the same, the northern and western portions thereof being somewhat colder. The prevailing winds in the winter and during the rainy season run from north to south, and vice versa in the summer time, though the same are not regular, for during many days a slight breeze is hardly felt. The rainy season generally begins in the months of May and June, and in some instances it has been known to commence in the last days of April, causing a sudden change in the appearance of the fields which

are rapidly covered by green vegetation, lying in a dormant state beneath the dust washed away by rainfall. The mornings of the Spring are very pleasant and so are the days of Autumn, especially in the month of October, and the winter nights, when the sky appears remarkably beautiful. In accordance with the benignity of the climate, the sanitary conditions of the place are generally good.

There are different temperatures throughout the district, but the climate in general is temperate, though there are some place which may be considered cold, such as Huisteco Teneria and Poder de Dios, which favor the cultivation of fruits and cereals of the cold regions, as the surrounding country is covered with abundant oak forests. Observations have been made over places considered as hot, and Réaumur's thermometer, during the summer season, does not exceed 26°, and as regards the mountainous part of the district I may repeat what Baron Humboldt had to say:

"On the slope of the Mexican Range, at an elevation varying from 1,200 to 1,500 meters, one can enjoy the pleasures of a delightful and everlasting Spring, never varying more than four or five degrees, this being the reason why excessive cold or heat are never experienced. This region is the one called by the Indians 'the temperate zone,' and in it the average heat during the whole year marks 20° to 21°, Centigrade. Such is the delightful climate of Jalapa, Taxco, and Chilpancingo, three

of the most noted cities on account of their beautiful climate, and the abundance of fruit trees cultivated in their vicinity." In speaking of the City of Taxco I will again mention its delightful climate.

The District of Taxco de Alarcon is situated on the western slope of the Great Mexican Range (considered an extension of the Peruvian Andes), and it embraces a mountainous portion of the state located between the Districts of Hidalgo and Aldama of the said State of Guerrero, those of Sultepec and Tenancingo of the State of Mexico, and those of Tetecala and Jojutla of the State of Morelos.

Making a fair reduction from the distances taken over intricate roads and bends and following a straight line, so far as it is possible, the district has an approximate area of 143 square leagues, or 429 square miles. As stated before, it is situated in the mountainous part of the state, where some of the highest peaks and deepest ravines of the mountains of Teneria are found, as also the intermediate passages of the Central Range, which in their greater part show a beautiful formation, and broad spaces between arid hills.

From the above it may be seen that the roads are generally uncomfortable, notwithstanding the care displayed by the authorities to keep them in good order, but in exchange the grandeur of the regions traversed by such roads compensates with excess the hardships of traveling over them.

#### Geological Formation and Mineralization

The principal rock formation of the mountains of this district, appearing on the surface thereof, according to the data I have been able to obtain, shows the presence of the schist, cretaceous limestone, andesite and other subordinate materials, there being no volcanic rocks in the vicinity. Mineral lodes are found through the schist and cretaceous limestone formations occurring in the various mining regions of the Municipalities of Taxco and Tetipac, and it appears that, at a certain depth from the surface, the lodes sink into the eruptive andesic rock. Talcous slate, according to investigations made at a certain depth, in several mines of the District of Taxco, appears to be covered by a stratum of grevish gypsum, resting, as stated, upon a limestone formation. The mountains of Taxco and Tehuilotepec are composed largely of an arenaceous shale and not mica-schist, as stated by Baron Humboldt.

Within the Municipalities of Taxco and Tetipac the famous mountain of Hiusteco is situated, its formation being largely made up of eruptive andesite, the same formation apparently extending towards the mountain of Teneria. The former mountain also contains several quarries, wherefrom rocks for construction purposes, of various colors and degrees of hardness are extracted. The surface of this mountain is traversed by lodes of quartz, large quantities of which are found in a loose state.

West of the town of Acamixtla, in the Tuledo mountain, which forms part of the Huisteco range, there are large beds of ichthyolite, which, on account of its abundance, is used for construction purposes. Many persons have taken this rock for coal, though the latter fossil has been discovered beyond doubt, in the northern slopes of the same range, in the direction of Cacahuamilpa, as shown by data and reports rendered upon the subject.

According to Mr. Karsten the second limestone stratum prevailing throughout the Jura Mountain, after which the stratum has been named, is the one found in the most famous caverns and caves, and on the rock beds. The first limestone stratum has been called by Karlsten, cavern limestone, which, like the Alpine formation, pertains to the class of rock beds.

To this class of cavern limestone pertains that of the mountains referred to in the foregoing description, where many other deposits of the same of various forms and extension, are found. Baron of Humboldt, in speaking of this region, says: "Through many important geological investigations, it has been demonstrated that there are in this country, between the villages of Tlamacozopa, Plantanillo, and Tehuilotapec, within the hearts of mounds of limestone formation, several natural caves

and galleries, following one another, and where several underground streams, similar to those of the County of Derby, in England, are found." It must be said that this mining region as well as that of Tehuilotepec, situated within the same district, extends beyond the range of mountains where Juliantla is located.

To the series of caverns mentioned by Baron Humboldt, pertain those found in the mountain of "Puente de Dios", said caverns affording a passage for the Chantalcuatlan and San Ceronimo rivers, which runs into the Huajiutlan, or Amacuzac River, better known under the latter name in most of the maps of Mexico. Another important cavern is found near the range of Juliantla, named "San Felipe Cave", wherefrom a large stream supplied with water several recovery plants of the old "patio" system, located on the line of such stream, the names of the plants being: Atlishuayan, Atlistac, Santa-Ana, Santa-Prisca, Tenancingo, San Sebastian, Hueymantla, and San Juan Bautista; but, for some reason or other, on the night of February 16, 1802, the above mentioned stream disappeared, its water taking a different course, though it was found two or three days after, running over the lands of the "Hacienda de Platanillo", at a distance of twenty kilometers from its original bed. The general belief among persons who have studied the cause of the disappearance of the above mentioned stream is that the water can be again brought to the surface, by

artificial means, of a more or less superior character, as there is no doubt, and it was so stated by Humboldt, that an underground river runs beneath the surface of that region.

Among the caverns of this district deserving special mention there is nothing superior to the cave of Cacahuamilpa. This wonderful cave was not known to man prior to 1833, when several persons looking for a place of shelter, due to the political revolts of the country, were so fortunate as to find this cave and avail themselves of its protection. The news of the discovery was soon spread throughout the country, attracting the consequent attention and a large number of visitors from all parts of Mexico and abroad, there being many among the latter who declared the cave of Cacahuamilpa as superior to the finest there are in Europe. At the beginning of the year 1847, Mr. Francisco Modesto Olaguibel, Governor of the State of Mexico, made a visit to this district, and having an opportunity to see the cave, dictated an order, dated February 23, of said year, to the end that visitors could only be allowed to go into the cave with a permit from the Prefect of the District, this measure being adopted because of the depredations affected by those who went into the cave, and who invariably did their best to carry away whatever appealed to their fancy. The Governor also ordered, among other things, that the authorities of Cacahuamilpa enforce an admission fee of one dollar for each person going

into the cave, and that the proceeds be devoted to the repair and maintenance of the road from fhe village to the cave, that a gate be also made for the entrance to the same, and that a portion of the subscription should be appropriated for the support of the primary schools of the locality.

In the year 1853, during the administration of General Antonio Lopez de Santa-Ana, the above order was amended, and on the twenty-third of December of said year, a decree was passed providing for a janitor of the cave, to be paid by the Municipality of Taxco, and that the entrance to the cave should be free to everybody. This last disposition was in effect but a short time since the revolution broke out at the beginning of 1854, the cave being then abandoned as it was until 1890, when a contract was entered into between the Government of the State and an enterprising man who up to the present time has brought a large number of visitors to the place.

The name of the village of Cacahuamilpa is derived from the Mexican language, in which it means: "Place where peanuts or cocoa are planted." The village is under the control of the Municipality of Tetipac, the cave being near the latter place. The entrance to Cacahuamilpa Cave is ample, the inside of it is spacious and imposing. In many places thereof, the cave measures eighty meters wide and as many meters high. In order to see the ceiling or top of the cave, people provide themselves

with fire rockets. The total length of the cave has not been ascertained yet, though a distance of 3,500 meters has so far been explored. The filtration of water, which in passing through the cracks of the rock gets saturated with carbonate of lime, forms into stalactites and stalagmites, that have come together, producing a beautiful variety of capricious designs, thus giving the cave a majestic and admirable appearance. The imagination of those who visit the cave find in these figures the resemblance or imitation of ornamental architecture, of animal life, fruits, and flowers. The ground is formed in many places by a plane crust of carbonate of lime; in others, it appears in the shape of furrows and ditches covered with water, the edge and depth of which gradually increase until they reach the top of the cavern. At other places the ground is occupied by large lumps of rock that have fallen from the upper part of the cave, which make transit rather difficult though feasible. From the entrance and over a distance of about 400 to 500 meters the ground is covered by a stratum of fine soft sand, which appears to be the result of stagnant water, and the union of stalactites and stalagmites, intercepting at various points the longitudinal passage of the cave, has formed several galleries of gigantic dimensions. It is believed that some of the rivers mentioned herein have passed in older times through this marvelous cave, as many of those who have entered into it a distance of about 3,000 meters

affirm that during the rainy season, the noise of a distant stream of water is plainly heard.

According to the data we have been able to obtain, there are three mining regions in the District of Taxco de Alarcon, one of them being situated in its center, another one in the eastern part thereof, in the vicinity of the villages of Tlamacozapa, Cascatlan, and Buenavista, and the other in the western part of the district, in the Municipality of Tetipac, between Poder de Dios Jocotitlan, and Pregones, the area of the latter region being double the size of the one in the center near Taxco, Tehuilotepec, and Juliantla.

With regatd to the first region mentioned, the same measures about nine and one-half kilometers from east to west, and upon its extreme ends are located Taxco and Juliantla, while Tehuilotepec covers the center portion thereof, extending about four kilometers towards the west southwest of Taxco. with an average length of six and a half kilometers south, the above mentioned area comprising the whole mining district of Tehuilotepec. The geological formation throughout this region appears to be composed by schists and partly of limestone, which covers the former in various localities. The above area measuring about eighty-five millions of square meters, is traversed by a rock formation of the class described, forming mounds and hills with deep ravines, containing an extraordinary large number of mineral lodes running in different directions. All these lodes contain more or less silver and gold, and their general direction runs from southeast to northeast, their incline varying from the nearest to the vertical line to forty-five degrees, called in Spanish "Hechado." The number of galleries, shafts, vent holes, cuts, and trenches is equally large, the same being a sign of the oldest works effected in the place.

The latter are mainly located between Taxco and the mountains called "Minas Viejas," about six and one-half kilometers south, it being probable that such works were made prior to the Spanish conquest, or at least a short time after the beginning of the same. It is in the slate formation where the greater part of the above mentioned works appear, the most remarkable of them, situated between Taxco and Tehuilotepec, being the shaft of "Pedregal," near the outskirts of Taxco, measuring 215 meters deep; the drifts of "Reyes" and "San Ignacio" in Tehuilotepec, the former measuring 566 meters and the latter 562; the "Guadalupe" adit of the "Trinidad" mine, situated in the "Pizarrilla" Mountain, measuring 1671/2 meters, cutting acrosss the mineral lodes; the drift of "Gerendiay" in the Partido Mountain, measuring 1291/2 meters; the adit of Xshocotitlan, 161 meters long, into which a fifty-five meter shaft has been sunk, and the famous drift called "Socavon del Rey," in the Campaña Mountain; the same being historically interesting because of its having been commenced by the Conquerer Hernan Cortes in such large proportions, that a distance of ninety meters of the same can be traveled on horseback, said drift having been continued by Don Jose de Anza, until he reached the principal lode at a depth of 530 meters.

Today the drift measures 649½ meters, the entrance of which is situated about 310 meters below the summit of the mountain, cutting across six lodes and thirty-four small veins. The most common matrix in the formation of the lodes are: Oxides of iron, called "Tepostel," which means "iron rock" in the Mexican language, and when the oxides are found in the form of gravel they are called "Istayal;" Kalspath, called "Espejuelo;" fluor spar, quartz, to which miners give the name of "Guija" (shoad stone), designating one of the species of it "Tehilote," meaning in Mexican "rock cristal," and formations of gentle slate are called "Tecacalote," which means "raven's rock."

The most commonly found pyrites are, galena, which is generally called "lead ore," with more or less silver, the richest in the latter metal, being the one with a fine grain and the one called "Reluciente" (clinquant), the galena having a coarse grain being called "Sorroche" (coarse gravel); ruby silver, which the miners of this section call "Nochistle;" Sulphurated silver, called "Black silver;" silver powder; yellow, gray and black blendes, of which the gray is quite abundant, as also are those called "Estoraque;" lead dust, silver glance, gray cop-

per, called "Pasta," gray silver, pyrites, native silver, and yellow copper or gilt bronze, also called "Sotlanque."

Sometimes a large quantity of blue copper or azure blue copper, to which the natives give the name of "Azulaque," is found, the green color formation being named Verditer, both of the above formations being rather rich in silver.

Tin and antimony are also found in these regions, the latter existing at Acamistla and Coapango, while the former is so scarce, that the lodes of the same are almost unknown and therefore their exploitation is very limited. However, tin mines were worked many years ago by the native Indians who made use of such metal as a sort of a coin, references having been made to this primitive form of monetary system by Humboldt, Lorenzana, and even Hernan Cortes.

Referring to gold, the old history of Mexico, written by Clavijero, states that Montezuma received at the time a tribute consisting of gold bricks from Tasco, said place being now known as Old Tasco. There is no doubt about the existence of the precious metal in the vicinity of the above mentioned place, as it has happened sometimes that gold has been found upon the sandy under surface of clay trays used by the natives to cook their bread (Tortillas), to which trays they give the name of "Comales," and are made from clay found in deposits existing in the locality.

Zinc exists in the form of a yellow, grayish and black blende. Baron Humboldt mentions four different kinds of formations, to wit:

First. Oxide of gray, red and yellow iron, containing native and sulphurated silver more or less disseminated; cellular and specular iron, some galena, magnetic iron, and blue carbonated copper.

Second. Kalspath, some galena and transparent fibrous gypsum, in the center of which drops of water and air and filamental silver are found.

Third. Silver of a bright red color, silver glance, a great deal of yellow blende, gray blende, galena, some pyrites of iron, kalspath and milk quartz. (This formation is considered the richest of the four).

Fourth. Silver bearing galena in large quantities, the same containing more silver when the separate grains threeof are finely divided; a great deal of yellow blende; few pyrites, quartz and kalspath.

It has been observed that in many of the lodes that have been exploited, the rich ores have been found almost at the surface.

More than one hundred years ago, an Indian, named Miguel Jose, while making charcoal at Juliantla, discovered upon the ground, where he had made his coal, several threads of silver, this leading him to discover a lode, which, upon being worked, produced from the start several millions of dollars, but owing to the imperfect manner in which the mine was worked, the same finally caved in, there

being no record of the condition in which it may be at present.

Several important companies have been organized in this mining district during the course of the latter years, and in order to give an idea of the encouragement given to mining enterprises, we will mention those companies which have invested the largest capital in the erection of recovery plants and mills.

The "Restauradora" mills, owned by Mr. Felipe Martel, of the City of Mexico, are undoubtedly the most important of their kind in the community. The same operate a large number of mines, having very rich lodes in their original condition and a modern smelter situated on the same place where the old Hacienda of Altlishuaya formerly was.

The Romero Rubio family, owning the very best mines in Tehuilotepec, have reconstructed the old Hacienda of Atlstac.

The mills of San Ignacio de la Borda, the name of which is derived from the fact that the "San Ignacio" mine was originally operated by Don Jose de la Borda, who, during the time he engaged in the erection of the church at Tasco, was so fortunate as to strike a bonanza in said mine, enabling him to invest over a half million dollars in the erection of the gorgeous church just mentioned. The mine is at present owned by Don Gonzalo Estrada.

The Pedregal Mining Company operates the "Pedregal" mine, situated in the vicinity of the

City of Tasco, and the company also operates several other mines located in the adjacent mountains of Santo Tomas, and the "La Florida" mills. The above mentioned company has invested a large amount of capital in machinery and mining implements.

The "Rosario" Company, situated about two kilometers from the City of Taxco, is working the famous old mine of Xshocotitlan and the "El Rosario" mills.

The "Purisima" mine and others of less importance, such as the Concepcion y Anexas, of which Don Luis Henze is the owner, have produced ores of a fair value, although they have been operated on a small scale.

Although the above mentioned mining institutions are now under successful operation, there are mines yet to be worked and other business to be developed, this being the reason why there is a constant demand for native and foreign capital, which could be invested in the exploitation of the vast wealth that has remained in a dormant state beneath the soil, either on account of the want of means or because of the political revolts to which the country was subjected in former years, or because science and mining methods have not had at their disposal the elements and facilities of modern times.

During a period of twenty years operations have been successfully conducted in several mines, among which the following stand at the head: "Rosario y Anexas," "Ojo de Agua," "Hueyapa,"
"Concepcion y Anexas," "Santa Gertrudis," "San
Pedro," "Santa Barbara," "San Luis" and "Zumpancuanpuitl."

The other mining district, lying east of Tasco, is, as has been stated, in the vicinity of Tlamazopa, Coscatlan, and Buena Vista. It measures an area of about twelve kilometers from south to north. Mining operations in this district are very insignificant, its principal formations being schist and kalspath. Lodes containing rich metals are not well known, and the number of those which have been discovered does not appear to be so large as that of the District of Tasco. Some of the lodes of this district are found to contain gray and magnetic iron. Between Tlamacazapa and Coscatlan two springs have been discovered, the water from which appears to be saturated with sodium chloride.

The mining district occupying the western portion of Tasco, within the Municipality of Tetipac, has been said to embrace a mineral zone twice as large as that of Tasco, Tehuilotepec, and Juliantla. The formation here appears to be the same (kalspath and limestone), with large masses of andesic jasper, which, in this locality, appear nearer the surface than in the Tasco region, the same belonging to the tertiary rocks characterizing the great bonanzas of Mexico. There is also a large number of argentiferous lodes running from southeast to northeast, in general, and traversing in many points

inaccessible mounds and ravines, and their formation is almost the same as that of the lodes found in Tasco, showing the same peculiarities and matrix. Many bonanzas have at times occurred in this region, where mining operations are evidenced by the presence of several shafts, drifts and excavations of different forms and importance. In this region (near Pregones), several deposits of compact hepatic mercurial ore and cinnabar of a metallic form, and also asbestos of a flexible aminathine form, have been found.

In the neighborhood of Chontacualtlan and Mogote, situated in the same region, large deposits of marble of good quality have been found. The handsomest that has been discovered in the last years is that from the Hacienda Argentina, and also the one found in the lands of the Hacienda de Santa Fe.

At the present time there are several mines in the above mentioned mining region under successful operation, among which figure the following leading enterprises:

The San Luis and Anexas Company situated at Poder de Dios, embracing within its claims the famous mines of "San Mateo" and "Pozo Hondo," such claims having been extended under the name of the "Bohemia," wherein the mines called "Concha" and "San Pedro Nostepec" are located. Active explorations are in course of development for the purpose of increasing the works in all of the above properties under regular methods.

There have been very lively times in all the three mining districts cited, owing to the bonanza of its mines, alternating with others when mining has had to labor under many hardships, either because of a decline in the production of the rich ores contained in these mountains, and more so on account of the political commotions through which the Republic has passed in former years, and which have necessarily caused the business of the whole country to come to a standstill. There have been many bonanzas where ores bearing twenty-six, thirtyfive, fifty-two, and up to 175 kilograms of silver per cubic ton, with a large per cent of lead and some gold have been mined out from the mountains of these regions. To the above mentioned bonanzas pertain the discovery made by the Indian Miguel Jose, near Juliantla, who, as has been stated, had the good fortune to find one of the richest lodes in the district, and also the mines operated by Don Jose de la Borda, who, only from a remainder of the fortune he accumulated, was able to devote over a half million of dollars for the material erection of the gorgeous church now used as the Parish of the City of Tasco.

The most prominent mines recorded on account of the large amounts of ore produced, although of a poorer kind than those of the lodes mentioned in the preceding paragraph, and where the cost of mining has been less expensive, occurring either before the war of Independence or at a later date, and of which there are many traditions and signs of their existence, are as follows: those named Trinidad, Bermeja, Espiritu Santo, Milagro, Pedregal, Mora, Santa Catarina, Xshocotitlan, San Pedro y San Pablo, Santa Maria, Zumpancuahuitl, and Analco, within the Municipality of Tasco; San Ignacio, Encarnación, San Lorenzo, Bejarano, San Agustin, Santo Niño, and Santa Gertrudis, in the Municipality of Tehuilotepec; La Estaca (belonging to Miguel Jose), and San Miguel, near Juliantla; San Mateo, Pozo Hondo, or Poder de Dios, San Buena Ventura, Petlacaginga, Orozco, Barones, Chontalpa, and Negrillas, in the Municipality of Tetipac; Jocotitlan and Pregones, near Poder de Dios.

There are two small smelters named "El Fraile" and "San Jose," the former treat all the ores from the Huiyapita mine, and the latter those from the mines of the Guadalupe or Ojo de Agua Company. The system followed in these smelters for the treatment of ores is old and performed in what we call Castillian furnaces. However, the smelters have a constant supply of ores to be treated in spite of their primitive methods and reduced scale of action.

Most of the ores and concentrates are shipped to the smelters established at Monterey and Aguas-calientes, either direct from the miners or through the purchasing agents residing in Tasco, among whom we will mention the agent of the National Metal Company and that of Pedro Flores.

## General Data and Remarkable Advantages of the Locality

In the Municipality of Tasco and near the town of Cacalotenango, there is a waterfall formed by a rivulet originating in the mountains of Teneria, the fall of which measures over 100 meters high; the base upon which the water falls is about twenty meters long, about eight meters wide, and from forty to forty-two meters deep, the curve formed by the stream affecting the elliptical shape. During the rainy season the above mentioned current increases considerably, and therefore the fall presents a magnificent aspect. There is another fall in the Municipality of Tetipac, named the fall of "Las Granadas," which, in spite of it being of a lesser height, thirty-five to forty meters, is by no means inferior to the other in importance. There are also many places where water can be stored to create artificial waterfalls for motive power purposes.

Other interesting features of the district, which we consider worthy of mention, are the vestiges of old Indian towns, which either disappeared or were removed to other localities; the summit of Huizteco, in the Municipality of Tasco, in Tetipac el Viejo, and Costlan el Viejo, Municipality of Tetipac, showing signs of ancient Indian settlements.

The District of Tasco showed a population of 32,013 through the census of 1900.

As has been stated before, the principal city in the District is Tasco de Alarcon, where the principal authorities of the district have their seat. The word Tasco is derived from the Mexican language, the original word Tiachco having been changed, which meant "ball game."

A short time after the conquest of Mexico, effected in 1521 by the Spaniards, the latter's attention having been attracted by the rumors, as stated by the historians, that Tasco or Tiachco was a deposit of large treasures; that the Kingdom of Montezuma received a tribute of gold bricks from the latter place, and that the explorers of Hernan Cortes had seen the natives use certain pieces made of tin as coin. It did not take long to discover the lodes of silver bearing ore lying in the vicinity of Tasco, so numerous in that region, and they at once began to operate the same.

The town which then was known as Tasco or Tiachco, is the one now known as Tasco el Viejo, situated about twelve and a half kilometers south southeast of the mining town of Tasco.

Eight years after the conquest, that is in 1529, a new town had already been formed in the locality, which the pioneer Spanish explorers of said mining regions considered the most convenient, not only on account of the regularity of the land, as all that region is mountainous, but more so, as has been remarked, on account of the benignity of the climate and good quality of the water. It was their desire

to make that place the residence of their families, conciliating this advantage with the proximity of the mines they were working and many of them being right in the town proper. The above mentioned town was given the name of Real de Tasco, and ever since, or rather a few years before, commenced the foundation of the city. Its population being mainly formed by the Spanish explorers and the Indians employed in the exploitation of the mines, who were brought even from the furthest localities for that purpose. The Indians started two wards in the outskirts of the mining town, naming one San Miguel, and the other Cacayotla or Acayotla, which means in Mexican "place where reeds formerly grew." It is possible to find even today certain characteristics of their original customs, imitated, perhaps, from their ancestors, although the marks of the race, especially among the Indians of the first mentioned settlement, apparently have disappeared, there being but little difference between them and the common laborers of their class. There are some documents relating to mining dating back to 1560, and the church archives date from 1593 to 1594, though there were once some older documents which have disappeared from the archives. The general files formerly kept in the Court of First Instance, and which dated back to 1529, were, according to hearsay, transferred to the capitol of the state.

Prior to the war of Independence, Tasco was the seat of a mining delegate, who acted as special court in mining matters, and after that time said mining town was made the seat of the district. There was, besides the proper authorities, employes and functionaries, an assay office for the collection of silver. This mining town, one of the oldest of the Republic, according to Baron Humboldt's statement, invaded the whole of Europe with its production of silver in 1570 and 1599.

The town, as stated before, is situated in the mountainous portion of the district, extending over the south south-east slope of the mountain of Atachi, occupying the various lanes thereof, intercepted by the ravines of the mountain proper, thus causing the town to have different elevations. The irregularity of the ground is remarkable in some instances, as there are places in the suburbs lying fifty-five meters below many others, while many spots stand 105 meters above the main plaza. The streets, which are by no means straight or broad, are more or less built on an incline, the one having the best level is that which traverses the center from the south to north entrance of the town, but forming a sort of a zig-zag line, owing to the formation of the locality. Most of the streets are paved with rock, thus facilitating traffic, said rocks being arranged in a symmetrical way, and in many instances show an ornamental arrangement where slate, quartz, and limestone have been combined. The main square is not very large, there being also six small plazas distributed throughout the town. The mining town is

provided by nature with more than twenty springs of sweet water, though not very large, which element the natives call "thick water," on account of its medicinal properties, the same being used by persons afflicted with stomach troubles. There are also other water deposits, the most prominent among them being those of Tetitlan, Pineda, and Betanzos, wherefrom water is used to irrigate several small nurseries of fruit trees and vegetable, situated in the lower portion of the town, among which stand in relief over the tops of buildings some very large ash trees, which lose their foliage in the winter time. The houses are mostly covered with red tile. Their front walls are picturesquely painted in different colors and by reason of the irregularity of the soil, are placed at different elevations, it being rare to find a one-story house in the front section thereof which has not two or more stories in the rear, or vice versa. The view from afar shows the houses closely built together, thus giving the town a picturesque appearance with a close resemblance to a Moorish city. Some of the buildings have a handsome facade. The most attractive building of the place, situated in one of the central heights thereof, is the majestic and elaborate church of the town. This deserves special mention, on account of its colossal structure, a model of the most perfect order of composite architecture, and it is provided with a magnificent public clock, the machinery of which has been installed in one of the steeples of the church. Its ornamented dial appears between the two towers, among sculptures of a delicate ancient order and paintings from the renowned artist Cabrera. The church was built towards the end of the eighteenth century, by a wealthy miner named Don Jose de la Borda, as stated before. It was finished on the third of December, 1758, and was inaugurated on the eleventh or twelfth of March, 1759.

The city is now divided into twenty-three wards. The latter bearing the names of the heroes of Mexican Independence, whose names appear in a suitable place on the outside walls of buildings, carved in a plate, which contains besides the name of the street, and in order to facilitate the knowledge of the same considering their irregularity, the plates are painted in different colors. The city proper, according to the last census, has 3,506 inhabitants, but in Tasco the number of people shown by the census is variable, as it depends a great deal upon the condition of the mines, which either force the people to emigrate or increase in number.

Drinking water is light and of a very good quality, it being carried into the city by means of an aqueduct four kilometers long, starting from some mountain streams situated west of the city where the water is collected by a dam. At the point where the aqueduct approaches the city proper and at an elevation of 196 meters above the level of the main plaza, the same is divided into several branches in

order to supply nine public fountains, distributed in a convenient manner throughout the city, and also three public tanks where the people in general, especially the lower classes, are allowed to wash their clothes or bathe themselves.

The city has a federal telegraph office properly managed, and the balance of the villages and towns of the district are connected with Tasco by means of telephone lines, which render the best of help to the authorities in order to preserve the peace of the community at large.

There are few mining resorts in the Republic that can afford to capitalists the facilities of this district. Considering that all articles of prime necessity are abundant and cheap, laborers are plentiful and demand less wages than they do in other localities. Construction material, wood and lumber, are found in the locality in large quantities, are cheap and of a first-class quality. Miners of a fair practical knowledge are found here in any number, though on account of their efficiency to work, are constantly being offered positions elsewhere. All the above mentioned circumstances, we believe, are favorable to those who intend to invest in mining pursuits.

During the present year a statue was erected to the memory of the insurgent General Vicente Guerrero, whose name was also given to the state. The statue was erected in the center of the picturesque plaza of San Nicolas. In its issue of November 16, "El Tiempo," one of the leading journals

published in the City of Mexico, having a weekly illustrated magazine, dedicated the following words relating to the above subject, which we consider just and for that reason we reproduce them herein: "We mentioned in due time a detailed account of the festivities attending the erection at Tasco of a monument to perpetuate the memory of the insurgent General Vicente Guerrero. In our present number of our weekly we have included several photographic views relating to the occurrence, taken for our paper, thus giving a more complete and graphic idea of the incident. The monument in question, as may be seen from the engraving, is extremely simple in its architectural form, without any excessive accumulation of mouldings and carvings, which might be of great merit, from an artistic point of view, but in the present case would take away some of the natural beauty of the monument derived from the rose colored stone of which it is built, and which is of the same quality as the one used to construct the Cathedral, so prominently known on account of its structural merit. The project for the erection of the monument was initiated by Don Francisco V. Bordón, Political Prefect of the District, who, thanks to the prestige he has been able to acquire by his honesty and integrity, received the hearty support of all the inhabitants of the district, who contributed cheerfully to realize the patriotic project. The ceremony attending the inauguration of the monument was really touching.

The people, circled around the monument at the time that the unveiling occurred, burst into one enthusiastic and roaring acclamation in honor of the great southener, born at Tixtla, who so bravely gave his life for the independence of Mexico, and also in honor of the Governor of the State and the political Prefect of the District. In unison with the roaring of human acclamations, the air was invaded by the sweet tones of all the bells in the city, the sounds of music and the explosion of hundreds of rockets fired at the same time. A few moments after the inauguaration took place a group of graceful and lovely young girls, in the name of the city, presented to Mr. Francisco V. Bordón a gold medal, which they placed upon his breast, said medal bearing the following inscription 'Honor and Gratitude to the Chief of a Free Community.-To the Citizen Francisco V. Bordón, State of Guerrero, Tasco, October 5. 1903."

Tasco has been the birthplace of several prominent men who have merited the respect of their fellow men, either in the field of science, of fine arts, or on account of their moral elevation; there being many who rendered valuable service to the cause of independence, whose names appear in relief in the history of our country. Owing to the want of space, we will only mention Don Juan Ruiz de Alarcon, whose name was given to our district. In 1606 he received his diploma as a Doctor of Law in the University of the City of Mexico, and soon after

became a man of wide reputation among men of letters, owing to several very brilliant poems and dramatic works. He died on the fourth of August, 1639, according to data furnished by Arroniz in his works relating to Mexican biographies, it being impossible to find the date of Alarcon's birth because the archives of the church in which the great man was baptized, the name of which is Parish of Veracruz, were destroyed by fire many years ago, said church being the depository of the archives of the diocese to which Tasco belonged, in the sixteenth century.

As the birthplace of this great man has been a source of many discussions, many other localities claiming the glory of having sheltered him the day in which he came to this world, we have secured reliable data which show in all probability that Don Juan Ruiz de Alarcon was born at this mining town. Therefore, in drafting out the present historical report of the district, we have not hesitated in advancing that he was a native of Tasco, and if necessary, we will furnish further data to establish our claim.

Many have been the praising words of comment in regard to Alarcon. The Biblioteca Hispano-Americana says that: "Tasco, his native town, was made greater through his genius than by the abundant gold of its mines." Lope de Vega and Carpio speak of him in the highest terms, admiring his vivid geniality, his rich imagination,

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vast erudition, and his polished and fluent command of language.

The Mexican Central Railway, which recently acquired the line formerly belonging to the Mexico, Cuernavaca, and Pacific Railroad, passes at a distance of twenty-five kilometers from the City of Tasco, but there are always some means of conveyance, either of horseback or stage coaches, to carry passengers from Naranjo station to the town. A good highway road is now in course of construction, which, when finished, will make traveling much easier and rapid.

