the second hill is graded for a distance of a mile and a half, and thence the grade is carried on an embankment across the plain to the distant mountains. Along the top of the level thus formed was built an aqueduct, much of which still remains in excellent preservation and testifies to the skill of its builders. It is formed of very hard plaster, made of lime and small portions of soft red stone, is about two feet wide, and has a conduit about ten inches in diameter,—a concave trough covered by convex sections of plaster, forming a tube. A part of this pleasuring place, though some distance from it, is the Bosque del Contador, a magnificent grove of *ahuehucetes*, enclosing a great quadrangle that probably in ancient times was a lake.

The great causeway to Ixtapalapan was that by which Cortez twice entered the city across the waters of Tezcuco, the first time hailed with demonstrations of welcome by myriads of Aztecs, the second, the occasion of Tenochtitlan's final conquest, greeted by the fiercest and

most desperate resistance.

Here were the famous gardens of Cuitlahua, Montezuma's brother, where he feasted the visiting Spaniards. Here, also, was the home of Guatemozin, the last great Aztec emperor. Now gardens and palaces have disappeared, and only a dusty, scantily populated village remains

High in mid-air, as it were, the climate of the state of Mexico, while it has a pleasant variety, leaves nothing to be desired by those to whom pure air without keen cutting winds, bright sun that does not scorch, and abundance of pure and running water melted from the eternal glistening snows are indispensable. The climate, be it said in a word, is such as to bring contentment and peace the year around, without undue lassitude at any time.

And yet this is the country of the sweetest, happiest dolce far niente on the globe. Here

man can be rich without being fatigued, and be happy without being either.

The value of rural property here is estimated at nineteen million seven hundred and seventy-six thousand and thirty-two dollars, and that of city possessions at five million three hundred and seven thousand seven hundred and seventy-one dollars; it is therefore evident that the people here are sufficiently well-to-do, as a whole, to satisfy the average demand. Yet those who bring here the feverish thirst for riches may find in her fertile plains and in the rocky veins of her grand and silent mountains "riches beyond the dreams of avarice," with surroundings permitting the mere money-grabber to live happily among the sources of his wealth.

The variety of climate permits the production of all classes of crops. There are abundant harvests of wheat, Indian corn, and other cereals in the valleys of Toluca, Iztlahuaca, Tenango, and Tezcuco, and of sugar cane, coffee, and other tropical products in the districts of Temascaltepec, Tenancingo, and others. The forest products are remarkable not only for their diversity but for their richness.

The raising of cattle is one of the principal resources of this state, and is increasing rapidly each year, the annual product already reaching eight hundred and fifty thousand head.

But pastoral life is giving way to more modern methods of existence and livelihood-winning. The iron horse is shrieking his way along over these vast plains and around and among these lofty mountains.

Toluca, the capital of the state, is united, since 1882, to the capital of the republic by the Mexican National Railway, which traverses a most picturesque country all the way to San Luis Potosi. All the railways which centre in the metropolis cross this state, giving it ready exportation for all its products.

The Mexican Central runs north and south through the state, from the borders of the

Federal District, through Lecheria, Cuautitlan, Teoloyucan, Huehuetoca, and Nochistongo; at Tula, just over the line in the state of Hidalgo, having a branch to Pachuca. This splendid railway gives direct and rapid communication, through Juarez and El Paso, with New York by the Santa Fé route to Chicago, thence over the picturesque Pennsylvania system, while branches from the main line give outlet on the Gulf of Tampico and on the Pacific at San Blas.

The National Mexican road, or Laredo route, also gives free communication northward with the rest of the world. What will make the railways pay best are, perhaps, the mineral

treasures that abound on every hand.

The mining industry is as yet little developed, although it is certain that with proper developing facilities it will be a most important factor in the state's material progress. In the mines of Temascaltepec and Zacualpam, as in those of Oro, the profits are large, gold, silver, lead, iron, and copper being obtained in large quantities. The supply of sulphur from the great snow-capped mountain, the volcano Popocatepetl, is enormous. There is in this district coal of excellent quality, and zinc is found in the form of blendes accompanied by silver ore. There is, however, greatly increased activity in mining in this state. The Quebradillas mines, in Temascaltepec, are limiting the amount of their dividends in order that they may continue indefinitely. The Tejupilco district is being steadily developed, and in the Sultepec district the Hidalgo Company is running a custom smelter, for which there is plenty of ore obtainable in the neighborhood.

The good citizens of Mexico are by no means ignorant. If any of them were, it would be their individual fault, for there are in the state one thousand and twenty-four public and seventy-nine private schools, in which are taught fifty-six thousand five hundred and fifty-two pupils, or more than fifty per cent. of those of proper age. There are eight hundred and forty-five boys' schools, with forty-one thousand nine hundred and fifty-eight pupils, and one hundred and seventy-six for girls, with eleven thousand four hundred and eighty-nine pupils. The amount expended on public institutions by the state of Mexico is two hundred and eleven thousand one hundred and four dollars per year.

In Toluca there is a splendid Girls' Normal School of Arts and Trades, established by Governor Villada. These schools are largely for the purpose of elevating the ignorant and inferior classes. In those for both sexes in Toluca are many of the Mazahuatl, Otomi, and Aztec indigenes, whose ambition is to return to their villages as primary teachers. The spread of the Spanish language, thus accomplished, will do much toward the unification of the republic and the inculcation of patriotic ideas.

The venerable Literary Institute of Toluca was reorganized in 1886 as the Scientific and

Literary Institute of the State of Mexico.

Public charities are also well organized. There are an asylum for boys and one for girls, a general hospital in the city, and a local hospital in each of the cities of Sultepec, Jilotepec, Tlalnepantla, Tezcuco, and Valle de Bravo.

The capital of the state of Mexico has a penitentiary, with spacious quarters, where machinery is run by steam-power, and the establishment is lighted by electricity. The object of this institution is the reformation of the criminal and the abolition of the death penalty. Humanitarian ideas of the most advanced character are evident at all stages of one's progress through this model institution. Education is compulsory, each prisoner being given sufficient instruction to enable him to earn his own living honestly by handicraft when he is liberated.

There is a woollen-mill at Toluca which produces handsome cloths. In this country

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manufactures have made such rapid strides, and have become so important, that it will not be long before it can be called a manufacturing centre.

A trip over the westward division of the Mexican National Railway is full of pleasure. The swift ride up the Madre Mountains, playing hide-and-seek with the volcanoes on the way along as the train enters the cañon on the mountain's crest, and the passing under the aqueduct hundreds of feet above the village of Ocoyocac, are exciting and interesting in the extreme. Leaving the city of Mexico from the Colonia station, the train passes under an old aqueduct, this is a country of aqueducts, - Chapultepec is seen to the left, the bell of Noche Triste and

GARDEN AND PALACE IN TOLUCA.

the churches of San Estebán and Los Remedios to the right; then through the valley and the Hondo, and over the hill to the Lerma and the valley of Toluca, there are fine views.

The soft-named and beautiful capital of this interesting state nestles at the foot of snowcrowned mountains, one of them the extinct volcano from which it is named, whose white top looks silently down with the calm of centuries upon the city with its hum and movement and restless progress, as the still ages might look down upon the onrushing to-day. Her wide and well-paved streets, her spacious plazas and shady squares, her

imposing buildings, some gray with centuries, some new with the spirit of the nineteenth century, combined with the delightful situation and the grandeur of the surrounding scenery, succeed in making this city of the upper air one of surpassing interest and beauty. Its modern institutions devoted to education, progress, and humanity deserve special mention in this brief record.

Toluca lies in the centre of the fertile plains west of the Sierra Madre. It is one of the cleanest cities in the country. Its parks and plazas are beautiful. From the summit of the volcano named one may look at once on the waters both of the Gulf of Mexico and of the Pacific Ocean.

In this, as in every other Mexican town, there is a plaza, which is a place of recreation for the people. Usually the cathedral and the government buildings are found on this public square.

The beautiful Alameda, the rendezvous for the élite of the city on fête-days and Sundays, is one of the most perfect parks in the republic. It is the result of the strenuous efforts of Governor Villada, a man wedded to his work in making the state of Mexico famous for its advancement and improvement. In this gorgeous display of verdure, drives, and lakelets he has succeeded in adding another feature to the already acknowledged beauty of Toluca. Entering this lovely park by wide arched gateways, we are confronted by a masterpiece of art

and industry. Swans gracefully curve their long necks to greet the visitor; deer, already tamed by the young children, come forward sniffing a glad welcome; and if it is the good fortune to visit this plaza on a fiesta day, there are lovely señoritas, clad in delicate gowns, gay parasols, colors,—everything pertaining to gladness and beauty. There we have an opportunity of studying a phase of life among the young folks in this vast country of relics.

A lovely girl passes, gayly decked in her own becoming color, her dark beauty enhanced by the blossom of youth. She is accompanied by some friend or chaperon, perhaps her mother, and behind her follows her novio, or sweetheart. It is in these parks and under the balcony of the young woman in question that all the love-making is done. Not a word alone are they permitted to utter, and the language of their eyes has brought their hearts to communion long ago. They are happy, for they know no other method of love-making. One could scarce imagine a girl in the United States subjecting herself to this custom, but she who has long since tired of the soulless flirtation is first to appreciate the utter sincerity in the rapid exchanged glances. The women of this country are gentle, womanly, beautiful, devoted to their husbands; tender, loving mothers, gracious, and gifted.

When Cortez and his hosts came to Mexico in 1519, the conqueror found the people in Toluca the most prosperous of the subjects of Montezuma. The Spanish had a revenue of five millions of dollars in one year from the deposits of precious stones alone in Toluca, and big baskets of emeralds, sapphires, and garnets were taken from the mountain-sides of Toluca for sale in Europe. Cortez began the erection of a home near Toluca for the comfort of his old and wounded soldiers. To this day may be seen the stone foundations laid for that structure, which went no further because of the sudden change in the fortunes of the conqueror. Com-

paratively few tourists in the old republic visit Toluca.

In going there from Mexico City the way leads down the beautiful Paseo de la Reforma, which united Mexico with Chapultepec, and takes one through Tacubaya and over a great mountain wall. Up above the last pueblo the climbing gets pretty steep, especially after leaving the pine belt. The fir-trees in this region resemble the hemlock-spruce, but have a different arrangement of the needles. Polypodium ferns grow in tufts on every hand, and cardinal flowers, but very long and straggling and by no means so beautiful as the same plant elsewhere. Scarlet tanagers and blue tanagers fly about everywhere. There are also sparrow-hawks even more beautiful in plumage than the tanagers, and doves unusually brilliant in color, not to mention hundreds of parrots of every hue and variety. On the crest of the mountains that divide the country of the Tolucans from the city of Mexico the character of the vegetation suddenly and marvellously changes. Here in the same altitude, but facing a warmer sun and milder winds, are forests of tropical chestnuts. Mahogany and tangerineorange-trees are seen, and the ground is green with the grazing plant known as alfilerea. About half-way down the mountain-range is a wide plateau, and about half a mile from it is the historic glen of Las Cruces,—the Bunker Hill of Mexico. The spot is marked by an obelisk, some thirty feet high, of limestone set upon a heavy foundation of concrete. This is the scene of the first real victory of the Mexicans over the Spaniards in the war of 1810. It was in the glen of Las Cruces that Hidalgo, with the mountaineers of the place, drove back the royalist troops with heavy loss. The engagement gave the Mexicans self-confidence, proving to them that under favorable conditions they might defeat the well-trained and completely armed soldiers of the Spanish viceroys.

Half a mile to the north, on the same plateau, is the old pueblo of Las Cruces. The population of the town is about twelve hundred, and its livelihood is derived entirely from the sale