

# *A Railway Through las Villas*

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From the first years after Mexico's independence and throughout the nineteenth century, the railroad seemed the most promising tool for resolving all the country's problems. Or at least, that was the imaginary of a people who had only just wrested their independence from Spain. Despite being impoverished and devastated by the years of fighting, Mexico would still have to confront serious violent conflicts that would coincide in time and space with the construction of the first railway lines and would significantly delay the completion of the country's first long-distance rail line.

This article reviews the progress of Mexican Railways through the Great Mountains in central Veracruz. The story began in 1837 when the Mexican government granted Francisco Arrillaga the first permit for building a railway. But he failed to lay a single track.

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Other more fortunate experiences followed, but it was not until 1857 that the government granted the license that would finally be used, overcoming all difficulties, to connect the port of Veracruz with the nation's capital. The route Arrillaga picked was surprising to some, but the one the Escandón brothers chose in 1858 spurred irate protests. It was the result of field research done by U.S. engineer Andrés H. Talcott and his technical team, hired by the licensees to determine the direction an interoceanic railway to join the Gulf Coast with Acapulco on the Pacific should take.

The first stage of the route was planned to leave the port of Veracruz, going through the towns of Córdoba and Orizaba—known during the viceroyalty as *las Villas*—and continue toward Mexico City.

Córdoba was located on the edge of a hot, marshy area, while Orizaba was situated in a fertile, healthy valley irrigated by the waters of the Citlaltépetl or Orizaba Peak. The two *villas* were located on a road used for cattle drives, the least favorable for setting up a railroad.



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The train first had to cross the coastal plain as rapidly as possible; this area was uninhabited because of the diseases that flourished there such as “black vomit” and malaria. Then it had to go through the deep White River or Metlac Ravine canyon, where the most complicated viaduct of the whole line had to be built. Finally, before reaching Mexico City's 2,223-meter summit, it had to ascend almost 1,000 meters over a short distance on the steep slopes of the Eastern Sierra Madre.

To do the job, in 1861 the licensees founded the Veracruz to Orizaba Railroad Company, including important political figures and well-known regional merchants on its board. However, the initial construction the company began in the coastal region coincided in late 1861 with the landing of French Emperor Napoleon III's invading troops who came to impose a monarchy headed up by the foreigner Maximilian of Hapsburg.

Under French control, the builders arrived at the Macho Pass in 1864, a village 76 kilometers from the port on the edge of a plain barely 460 meters above sea level. The railroad would stop there for almost six years without advancing an inch, facing the mountains and the Chiquihuite Ravine.

In 1867, lacking the support of the French army, Maximilian was executed, national troops recovered Mexico City and Benito Juárez reestablished constitutional order. The railroad then known as Mexican Imperial [Railway] ran 139 kilometers in the opposite direction, from the capital to Apizaco in the state of Tlaxcala.

President Benito Juárez's intention of pardoning Escandón's dealings with the Empire in the public interest caused a great deal of indignation and political debate. However, Congress decided in favor of the company, which changed licenses for the fourth time in 1868. The railway that was



intended to reach the Pacific Ocean once more lowered its expectations and changed its legal status. The new Mexican Railway Company, Ltd., committed to build the 255 kilometers that the Talcott project had established between Apizaco and Macho Pass, besides adding a 50-kilometer length of track to the city of Puebla.

Activities were immediately resumed in the lowlands; crossing the Chiquihuite Ravine took a year's work, and, even though the village of Atoyac is only six kilometers from Macho Pass, the steam engines did not arrive until January 1871. Between Atoyac and Córdoba is the Atoyac River, making it necessary to build a 100-meter bridge today used for pedestrian traffic.

From the Chiquihuite Hill on, the scenery changes; the temperature drops and the railroad goes through a rich agricultural region, with a temperate, humid climate, the home to innumerable pre-Hispanic settlements and later, important haciendas that cultivated sugar cane, coffee and tobacco.

The *villa* of Córdoba, founded in 1618 to provide safety to freight and passenger traffic, saw its first locomotive in August 1871. By that time, it was nationally important because the treaties that granted Mexico independence had been signed there on August 24, 1821.

To allow the train to get closer to the town, engineers George Foot and Donato Murray changed the original route and built the station on a wide, slightly sloping curve. Their gesture was well received and motivated local inhabitants to also build an urban train that would extend its service to the new station.

The tracks stopped at Fortín Station, located at the foot of Metlac Ravine. The technical team, headed up by engineer Guillermo Cross Buchanan, had to build a 304-meter-long, 114-meter-high viaduct, already planned in the time of the Imperial Railway, or come up with a new design to cut costs and construction time.

They decided to go around the ravine, going down its slopes until they found the best place to cross the Blanco River. They built several tunnels and three bridges; the main bridge was a 135-meter-long curve, 28.15 meters above the river itself.

The Metlac viaduct was finished in 1872 and over it rode the famous, unique English double-boiler Fairlie locomotives, built especially for mountainous regions. In 1928, with increased freight, the mountain length of track was electrified and new locomotives, built by the American Locomotive Company, ran over the Metlac Ravine.

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When you leave the ravine, the scenery changes; you can see to the end of the Sumidero Valley, which looks narrow because of the closeness of the mountains. The train went through this area for the first time on September 5, 1872, when it arrived at Orizaba station, outside the *villa* and very close to Cocolapan, a prosperous thread factory owned by the Escandón family.

From the beginning it was a hum of activity; the project was ambitious. The builders reported the station house finished in 1875. It was an interesting brick building on a long platform where warehouses and restaurants were also built. The complex kept growing: the most important machine shop, carpenter's shop and sheet metal and boiler shop of the whole line were built in the patio.

The line between the port of Veracruz and Mexico City was inaugurated January 1, 1873. The first trip, headed by President Sebastián Lerdo de Tejada, is considered historic and the beginning of the railroad era in Mexico.

Today, Orizaba's station no longer serves passengers and stands empty. The round house and its rotating platform that saw so much service are still recognizable and there is a nostalgic air about the whole place.

How much did Mexican Railway influence the region's industrial development? It depends on how

you look at it. The fact is that since then, in addition to the Cocolapan factory founded in 1836, other important textile factories were built there: San Lorenzo in 1881; Cerritos in 1882; the Orizaba Industrial Company (CIDOSA) in 1889. New industries continued to be built: in 1893, Santa Gertrudis, a plant specialized in jute processing was established. The runoff from Orizaba Peak, in addition to being abundant, had a low mineral content, which was taken advantage of by another new company, the Moctezuma Brewery, starting in 1896.

Mute witnesses to all that activity are still left today: the daring bridges, the tunnels that can be walked through, and innumerable railway stations, one for every town in the mountains. **MM**

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#### FURTHER READING

- Baz, Gustavo and Eduardo L. Gallo, *Historia del Ferrocarril Mexicano*, Riqueza de México (Mexico City: E. L. Gallo & Cía., Editores, 1874).
- García Díaz, Bernardo and Laura Zevallos Ortiz, *Orizaba, Veracruz: imágenes de su historia* Collection (Mexico City: Gobierno del Estado de Veracruz, 1991).
- Garma Franco, Francisco, *Railroad in Mexico. An Illustrated History*, vol. 1 (Denver, Colorado: Sundance Publications Limited, 1985).
- Gresham Chapman, John, *La construcción del Ferrocarril Mexicano, 1837-1880*, Sepsetentas Collection no. 209 (Mexico City: Secretaría de Educación Pública, 1975).
- Guadarrama Olivera, Horacio and Adriana Navega Chávez Hita, *Córdoba, imágenes de su historia* (Mexico City: Universidad Veracruzana/Ayuntamiento Municipal de Córdoba/Ediciones El Naranja, 2000).