## Lighting the City

We are daily growing more and more in need of street lights. We should like very much to see San Diego lighted by electricity, and we believe that the public are quite willing to pay any reasonable expense of that system. But, light of some kind we must have, and very soon, if our city means to keep up with the sister towns of Southern California.

--San Diego Union, July 1, 1885.

The world was looking bright for San Diegans in the summer of 1885. The long-sought railroad link to the East was on the horizon. Property sales and building activity was booming, and the population was growing. The town of San Diego was about to become a city. "The boom is near at hand," predicted the *Union*, but added cautiously, "The condition of our streets, enshrouded in darkness, will be intolerable when the establishment of through railroad connection brings suddenly upon us the inevitable rush of population."

The solution San Diego chose to end its shroud of darkness was the "Arc Lamp." About the same time that Thomas Edison was developing his incandescent light bulb, other American inventors were improving the arc light or "electric candle," a technology that created bright light by sending a stream of high voltage between two carbon poles inside a large glass globe. As the carbon "candles" burned they produced a brilliant glow, capable of illuminating whole city blocks.

Wabash, Indiana installed a system of arc lighting atop its county courthouse in 1880, becoming the first electrically lighted city in the country. Soon cities across the county began installing arc lamps on high towers to illuminate their streets. New York City had thirty miles of streets lit in 1886. In Los Angeles, arc lamps on top of thirty-six wooden masts—nearly half of them 150 feet tall—illuminated downtown streets in 1884.



An arc light tower at 5th and F streets in 1886

Eyeing the Los Angeles example, members of San Diego's Board of Trustees traveled north in February 1885 to witness first-hand the wonders of the new street lighting. Trustees John Snyder and Matthew Sherman were impressed and announced on their return that "electrical lights for lighting large areas of territory . . . would be far preferable to any other system of lighting, and would give more general satisfaction."

The city began soliciting bids that called for the "Tower or Mast system of Electric Lights." The proposal called for three or more towers, 150-feet tall, and topped with lights of 3000 candle power each. Months of frustration followed as local bidders tried and failed to satisfy the technical requirements of the contract. In October—one month before the arrival of the first

transcontinental train from the East—San Diego accepted the bid of the Jenney Electric Light of Indianapolis to furnish arc lamps and the power to light them.

The Jenney arc lights began to slowly appear in the spring of 1886. Powered by a small electrical plant at Second and J Streets, the lights burned from sundown to midnight in clusters of six lamps on top of 125-foot steel masts. Located on street corners, the masts were kept rigid with steel braces and cables. Ten masts were in place by 1889; more would be added in the 1890s.

The arc lights drew mostly positive reviews. And the system was cheap; the city's initial contract with Jenney called for 24 lamps at \$288 each, per year. But with San Diego in full economic boom, more lamp towers were needed. "The city has extended so much since the contract with [Jenney] was made," explained the *Union* in May 1886, "addition to the present light has become necessary."

Private subscriptions from property owners added some lights. Dr. P. C. Remondino, one of San Diego's most successful physicians, raised money from downtown businessmen to erect five lights on Sixth Street, making it "the best lighted street in the city."

But not everyone was captivated by the quality of illumination. "Can anyone tell us what is the matter with the electric light?" asked a San Diegan in a letter to the *Union*. "It has lately shown a very dim and flickering ray. To the dweller on the hilltop, painfully picking his way through newly graded streets, this light is a veritable *ignis fatuus*."

Arc lamps did have their limitations. The light was brilliant but only in confined areas. On the tall towers, the lamps cast a diffused "twilight glow" over a broad area. The lamps also tended to flicker and hiss as the carbon rods, which had to be changed *daily*, burned down throughout the evening.

The daily "trimming," as the carbon replacement and lamp adjustment was called, made the lights very labor-intensive. Mast climber Carl Wiggins, who would later rise to become a superintendent for the San Diego Gas and Electric Company, serviced a dozen towers a day, making his rounds on a bicycle.

In a newspaper interview in 1934 Wiggins recalled:

My job was to climb to the top of those old light towers that used to be scattered around the city many years ago. They were about 125 feet high and I had to go up them daily to renew the carbons in the arc lights. And when you got up a ways they would start to shake in a way that didn't seem a bit comforting.

In the 1890s, the technology of incandescent or "low arc" lighting began to interest municipalities. The San Diego Gas and Electric Company, which had replaced Jenney Electric as the provider of street lighting in 1887, began to offer new options with incandescent and gas lighting. At the same time, the San Diego city council began to order "low-arm" street lights to supplement the tall arc light towers. But the tall masts would continue serve San Diego for many years, gradually disappearing in the early 20<sup>th</sup> century.



Looking north on Fifth Street from H Street (Market), circa 1887. San Diego Public Library

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