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Candles or small lamps that burned lard or whale oil lighted the homes and public streets of Detroit in the 1800's. The lights for public streets were oil lamps mounted on posts, located at street corners. At the time, Detroit boasted a population of 900 people.

By the middle of the century, whale oil and candles gave way to kerosene lamps. But the sooty and smelly kerosene was soon competing with a flourishing gas lighting business. In 1872, two gas companies, The Mutual Gas Company and Detroit Gaslight Company divided the city between them. The Mutual Gas Company took over the east side and the Detroit Gaslight Company took over the west side of Woodward. The incandescent light bulb made its first Detroit appearance at Metcalf Brothers dry goods store in 1883. Soon other merchants in the city's central business district started demanding light bulbs of their own.

In the 19th century, there were three forms of public lighting: gas lighting, electric arc lighting, and electric incandescent lighting. The standard eventually became incandescent lighting.

Gas lighting was used for public lighting and interior lighting in both residences and businesses. The gas used was a coal gas which was accidentally discovered in the 1840's as a by-product of tar production. After gas was extracted from the coal, it was stored, and then delivered to users through a network of pipes laid under city streets. The primary drawback to gas lighting was the danger of fire, particularly indoors. Leaking or partially closed light fixtures could fill a room or building with an explosive volume of gas, resulting in a deadly blast that often led to fire. The Great San Francisco Earthquake of 1906 is also known as The Great Fire because the greater part of its destruction was the result of fire caused by the quake-shattered gas lighting network.
Gas lighting, because of its soft glow, was barely adequate indoors, but outdoors, the dim glow scarcely carried from the lamppost, creating shadows on the street below.

Arc lighting, which gave a bright light similar to a mercury vapor lamp, offered a solution to this problem. Arc lighting, used an electric current passed between two carbon electrodes, creating an arc. Light results from both the arc and the incandescence of the carbon electrodes as they burn in the open air. In the 1880's, the City of Detroit contracted for six arc lighting towers in downtown around Campus Martius. Though the arc lighting towers continued to appear in downtown photographs up to the late 1910's, it is unclear when they were abandoned for the use of incandescent fixtures on street poles.

Some of Detroit’s History with Electric Lighting:

1879  Detroit’s first electric lights switched in the Free Press building on West Larned
      First electric light in a home was turned on for the wedding of Grace McMellon.

1883  Electric Arc Street Lighting
      The first electric arc street lighting was installed on Jefferson and Woodward.

1886  The Edison Illuminating Company of Detroit was established and served its first customers. Seven years later, Edison Illuminating and other electric companies in and around Detroit consolidated which later formed the Detroit Edison Company.

1895  The city began its own public lighting in April 1895, having a large plant on the river near the center of the city. It lights the streets and public buildings, but makes no provision for commercial business. The street lighting is done partly from pole and arm lights, but largely from
steel towers from 100 ft. to 180 ft. in height, with strong reflected lights at the top.

Henry Ford, left, at the Edison Illuminating Co., 1895

1918 The first red, yellow, green traffic light was installed at Michigan and Monroe.

1948 June 15, the first night game at Briggs Stadium, now known as former Tiger Stadium. Eight light towers were erected with 1,458 light bulbs. The Tigers beat the Oakland Athletics 4-1. This was the last stadium in the American League to install lights, second to last old classic ballpark, before Wrigley Field.

1981 On November 23, 1981, Detroit Mayor Coleman Young and Windsor Mayor Bert Weeks jointly turned the switch to illuminate the Ambassador Bridge for the first time in its history.

**Menlo Park at Greenfield Village, Dearborn, Michigan**

Menlo Park, New Jersey, ca. 1880.

Thomas Edison's Menlo Park laboratory complex and the inventions he made there are over 100 years old. When Edison built the laboratory in 1876, it was the first industrial research laboratory in the United States. Four years later, in 1880, Menlo Park looked virtually abandoned.

By 1886, Edison and his entire team had abandoned the Menlo Park site. In the 1920s, Henry Ford wanted to move the old "invention factory" to his museum in Dearborn, Michigan. When Ford and Edison went to New Jersey to recover the buildings they found that most of them had been removed or had collapsed. Ford had his staff reconstruct the Menlo Park buildings from photographs and a few surviving original materials.
Edison's laboratory at Menlo Park after it was rebuilt at Greenfield Village. Edison said the only thing Ford got wrong was that the floors were so clean.

Henry Ford and Thomas Edison laying the cornerstone of Henry Ford Museum, 1929

Ford and Edison at the 50th anniversary of the incandescent bulb

Edison recreating the invention of the incandescent light bulb at Greenfield Village dedication, 1929.

Edison, left, President Hoover, and Ford tour the rebuilt Menlo Park lab.
Menlo Park Laboratory

This is the reconstructed laboratory where Thomas Edison made most of his famous experiments including the incandescent lamp.

Menlo Park Office and Library

This replica building is where Thomas Edison’s staff took care of business accounting and correspondence and drawings for his patents and dealt with reporters as well. Edison had an office and research library on the second floor.

Menlo Park Glass Shed

Built in 1876 in Menlo Park, New Jersey, and relocated in 1929 this is where Thomas Edison and his workers did glassblowing for the instruments, experiments and the glass envelope for the lamps.

Menlo Park Machine Shop

Built in 1929 in Greenfield Village this is a Replica of original machine shop.

In this building Edison’s ideas were put into three-dimensional form. The upper room of this building served as the first central power station when Thomas Edison demonstrated his lighting system to the press on New Year’s Eve 1879.
Greenfield Village's Edison Illumination Company, built in Greenfield Village in 1944, is a partial reconstruction, one-quarter size, of Station A, the first of the Edison Illuminating Company's early power plants in Detroit Station and the first electric power plant in the city of Detroit. Station A served Detroit customers with safe and inexpensive direct current (DC) electrical power for homes and businesses from 1886 to 1900. Coal-burning boilers on the first floor, provided power to steam engines which were connected to dynamos on the floor above.

Henry Ford began working at the Edison Illumination Company as a steam engineer in 1893, eventually rising to chief engineer for this plant in 1893. He could have had a successful career in the electric power industry but left it in 1899 to try a risky new business of designing gasoline-powered automobiles.

IESNA Michigan Section History

The Michigan Section of the IESNA was chartered in May of 1923, which covered the whole state of Michigan. In May 1925, the section was separated where the western counties were assigned into a new Western Michigan Chapter and Gogebic County in the western side of the Upper Peninsula was assigned to the Twin City Section. At the time, local membership was at 248, including all of Michigan. As of 2005, our section has 170 members.
IES Michigan Section

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