



Richard
Neumann
Architect

610 Grand Avenue, Petoskey, Michigan 49770, 231.347.0931

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PRESERVATION EDUCATION SEGMENT

EXTERIOR LIGHTING

The introduction of the carbon filament light bulb in 1879 started the move away from gas lighting. Thomas Edison came up with the first practical light bulb in 1881, and by 1890 the first incandescent light was developed. As electricity was very unreliable early on, the switch (get it?) to it from gas was not a single big leap to the new technology (as is often the case), but a slow evolution resulting in dual-fuel light fixtures - using both gas, with the glass shades oriented up, and electric, having the shades open down.

The use of outdoor lighting on private property became commonplace in the 1920's, so that entryways and yards of residences were illuminated as well as shop windows and sidewalks, using arc lamp bulbs and incandescent lamps.

Man-made light sources evolved from the use of clay oil lamps as early as 5,000 years ago. Metal lamps from the early iron age were apparently developed by the Celts. The choice of fuels varied widely based on availability, such as animal fat, fish oil, vegetable oils, and natural petroleum seepages. By the mid-19th Century sperm whale oil became the preferred choice for lamps.

The use of candles in history is misunderstood, as they were not commonplace, but were a luxury, made of tallow or beeswax.

The use of gas as a fuel source in lighting came about as a by-product of coal mining, which released gas. Burning coal released even more gas, and advances brought gas piped to light fixtures, first used in a Rhode Island textile mill in 1806. Gas could be created either at a central community source, or at home in rural locations. Matches were invented in 1829, and people could then "carry the fire" to light fixtures.

Sources:

"Lighting Technology: from darkness to opportunity", Robert L. Smith, PE, University of Illinois School of Architecture, Architectural Lighting, November 1986.

"A Brief History of Outdoor Lighting", Outdoor Lighting Manual for Vermont Municipalities, Chittenden County Regional Planning Commission, 1996.