

Early Lamps by Westinghouse

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Thomas Edison invented and demonstrated the incandescent lamp in the year 1879. George Westinghouse also had an early interest in the area of electricity. The early work on electricity that he did was done at the Union Switch & Signal Company. He had started Union Switch & Signal in the year 1881. Recent research using old documents located in the George Westinghouse Museum archives reveals that this interest in electricity resulted in George Westinghouse having a fully operational incandescent lamp manufacturing department located at the Lawrenceville, Pennsylvania works of the Union Switch & Signal Company in the year 1884. It turns out that this incandescent lamp manufacturing department was set up by the great Westinghouse engineer William Stanley. Stanley was also the engineer that did the early work on the Westinghouse alternating current transformer. William Stanley also did the work that made the demonstration of alternating current illumination of the town of Great Barrington, Massachusetts possible in 1886. George Westinghouse also started the Westinghouse Electric Company in the year 1886. This is a most interesting discovery as the George Westinghouse biographies that exist and other written accounts indi-



Early Westinghouse incandescent lamp

cate that George Westinghouse's first foray into the area of incandescent lamps was with the Westinghouse two-piece, all-glass stopper lamp that was used to illuminate the Chicago World's Fair (Columbian Exposition) in the year 1893. It is most interesting to now know that George Westinghouse was manufacturing incandescent lamps at the Union Switch & Signal Company a full nine years before the Chicago World's Fair of 1893. Thomas Edison had sued George Westinghouse and other manufacturers of incandescent lamps for patent infringement so George Westinghouse was concerned that if the courts upheld the lawsuit by Edison that he could run into serious problems with his contract to illuminate the Chicago World's Fair of 1893. Therefore he acquired another incandescent lamp manufacturer named Sawyer-

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Mann. George Westinghouse strongly believed that the new Westinghouse stopper lamp, which was based on the Sawyer-Mann patent, would definitely hold up to the scrutiny of the courts as it was a lamp that did not have a vacuum. All the other incandescent lamps of that period of time, including Edison's patented lamp, were produced with a vacuum and were sealed against leakage. The screw type base that is used on our light bulb today was the type originally used by Edison. Westinghouse based lamps over time came in four varieties. A single pin push-in base. That is, one just had to simply push the lamp into the socket and pull

the lamp to take it out of the socket. Westinghouse also had a two-pin incandescent lamp that he invented in 1894. One pushed this lamp into the socket and turned it clockwise 90 degrees. To remove one turned the lamp 90 degrees in a counter-clockwise fashion. The all-glass Westinghouse stopper lamp was of this variety. Westinghouse also manufactured a two pin brass based lamp. The last type was when Westinghouse adopted the screw type base which became the standard for incandescent lamps in the early 1900's. Interestingly florescent lamps today still use the Westinghouse created two pin system.

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