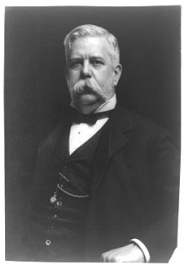
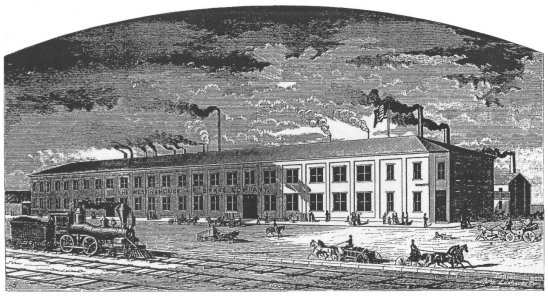
PITTSBURGHOPERA

Facts about George Westinghouse and his Air Brake Factory



George Westinghouse, Jr. (1846-1914), the son of a man who made farm machinery in New York, was an American entrepreneur, self-taught engineer, and productive inventor. One of his most important creations, the revolutionary air brake that used steam from the locomotive to operate it, helped to resolve commercial obstacles and perpetuate the Industrial Revolution. His creations changed the way people lived and traveled, perhaps more than any single individual. In 1869 the Westinghouse Air Brake Company, located at 2425 Liberty Avenue, was producing a practical automatic braking system for the nation's railroads, revolutionizing that industry by allowing trains to operate at much higher speeds. Before this invention, many accidents happened because each railroad car had to have its brakes applied separately and manually by individual brakemen. He also invented a uniform control system for the operation of switches and signals that led to the creation of the Union Switch and Signal Company.

George Westinghouse served in both the Union army and navy during the Civil War, and is buried in Arlington National Cemetery. His integrity as a manager and a leader is evident today in Schenley Park—years after his death, thousands of former employees and retirees of Westinghouse companies privately funded a memorial to the man who led them and instituted humane conditions in his factories. The humble and industrious Westinghouse probably wouldn't have envisioned how respected he would be and couldn't conceive that the sprawling brick structure of the Westinghouse Air Brake Company that occupies a Liberty Avenue block would be used for so many types of businesses:



Liberty Avenue, Twenty-fourth and Twenty-fifth Streets.

1869 Westinghouse Air Brake Company began producing braking systems for the nation's railroads. By 1879, Pennsylvania could boast that "no one special branch of our manufacturing industries has disseminated more widely a knowledge of Pittsburgh and its characteristics than WABCO." Employing an army of men, and numbering among its customers almost a complete list of the railroad companies, car builders, and locomotive works of America, it was one of the largest and most important industries of Pittsburgh.

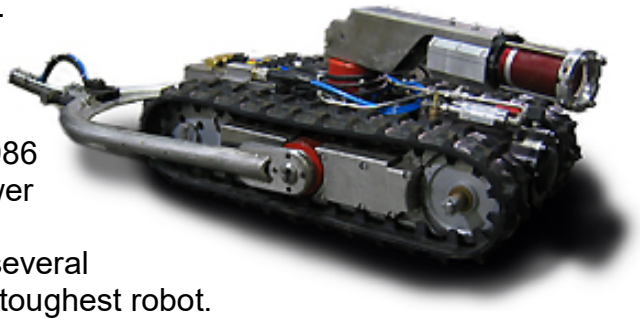
1881 Westinghouse Machine Company began manufacturing in the building, after the Air Brake Company moved to a new building in the City of Allegheny. The Sanborn Atlas depicts the structure as two parallel buildings housing a Foundry on the alley side and a Machine Shop on the Liberty Avenue side, with a two-story chamfered-corner office building on the 25th Street side.

1893 Westinghouse Machine Company added a third story to the Office.

1906 "Pittsburg Screw and Bolt Company" included a machine shop and blacksmith on the alley side, a machine shop and stock room on the Liberty Avenue side.

1900s Vulcan Motor Trucks advertised on the office section of the building. Other tenants included the Otto Milk Company and the Civic Light Opera, which used it to build theater sets.

1990 RedZone Robotics bought the building. Founded in 1987 and named for Carnegie Mellon University robotics genius Red Whittaker, RedZone was founded in response to the April 26, 1986 accident at the Chernobyl Nuclear Power Plant in the Ukraine. Working with the Department of Energy and experts at several universities, RedZone built the world's toughest robot.



The four-foot-tall *Pioneer*, half bulldozer and half R2D2, was designed to take photos inside the reactor building and push its way through the rubble, clearing paths to help people dash in and out quickly. When the business of inspecting nuclear accident sites dropped off, the company refocused its R & D to develop "trenchless technology" to inspect and assess water and sewer pipelines.

2000 National Development purchased and renovated the building, winning awards from the Mayor's office and the Historic Review Commission. Tenants included high-tech firms, such as technology and marketing firm Mind Over Media, S/D Engineers Inc., and Smith Brothers Advertising.

2008 Pittsburgh Opera purchased building and renovated it for producing and rehearsing opera. The original exposed brick interior walls, 150 historically accurate windows, and the original metal fire safes where Westinghouse, according to legend, stored his paperwork every night when he closed the factory, were kept intact. To commemorate the building's Westinghouse origins, the Pennsylvania Historical & Museum Commission installed an historical marker near the original office entrance.

The U.S. Green Buildings Council (USGBC) awarded Pittsburgh Opera LEED® (Leadership in Energy and Environmental Design) certification to the Silver level under its Operations and Maintenance category. The award establishes Pittsburgh Opera as the first green opera company in an existing building in the U.S. and the Company's headquarters as the oldest LEED-certified structure in Pittsburgh.

2021 Renamed the **Bitz Opera Factory,** Pittsburgh Opera's home has a storied and rich history—what better place to produce artistically excellent operas from a vast repertoire, using a fresh and visionary approach.