

**Volume 3**

**Number 183**

**New York's First Subway**

**Lead: New York needed a subway. Alfred Beach was ready to supply it.**

**Intro.: *A Moment in Time* with Dan Roberts.**

**Content: By 1870 the need to move people quickly around the City of New York was apparent to all. The streets were clogged with pedestrians and horse-drawn vehicles and the steam and smoke put out by locomotives. Alfred Ley Beach, editor of the *Scientific American* and an inventor in his own right, had been experi-**

**menting with pneumatic propulsion, the use of air pressure to force a cylinder through a tightly sealed tube.**

**The City of London had already inaugurated underground transportation with a steam-powered subway in 1863, but this had proved itself less than satisfactory. Though the London tunnels were not lengthy, the fumes from the steam boilers kept building up, threatening the lives and health of the passengers. The British had developed a couple of small experimental air driven tunnels, but these were used to carry mail and packages. Beach heard of these tests and designed a subway based on the British model, only larger, enough to ac-**

**commodate a number of passengers in relative comfort. He needed only the leave of municipal authorities to begin.**

**In the 1870s, New York was dominated by Tammany Hall, a political organization led by William M. “Boss” Tweed. When Beach came seeking permission to build the subway, Tweed blocked his way. Through a legislative sleight of hand, Beach trumped the usually perceptive Tweed and a demonstration project was authorized.**

**From the corner of Warren Street and Broadway, deeper even than water and sewer lines, the Beach**

**Pneumatic Transit ran 100 yards westward to Murray Street. Beginning in 1870 passengers descended to the splendidly appointed waiting room, boarded a cylindrical car and were propelled back and forth through the brick-lined tunnel on a stream of air generated by a 100 horsepower pump. It was a publicity triumph, but Tweed recovered and blocked Beach from further construction. In the financial panic of 1873 New York's enthusiasm receded and the City did not get its first subway until after the turn of the century. By that time Alfred Beach's dream of transporting passengers on a clean, quiet, comfortable stream of air had become just a memory.**

**At the University of Richmond,  
this is Dan Roberts.**

**Resources**

**Allen, Oliver E. "New York's Secret Subway," *American Heritage of Invention and Technology* 12 (3, Winter 1997): 45-48.**

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