

By [Mary Bellis](#)

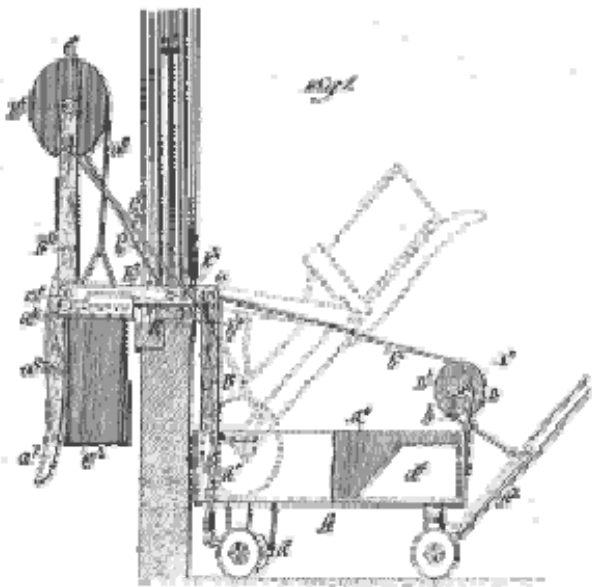
Fire Sprinkler Systems

From 1852 to 1885, perforated pipe systems were used in textile mills throughout New England as a means of fire protection. However, they were not automatic systems, they did not turn on by themselves. Inventors first began experimenting with automatic sprinklers around 1860. The first automatic sprinkler system was patented by Philip W. Pratt of Abington, MA, in 1872.

Henry S. Parmalee of New Haven, Connecticut is considered the inventor of the first practical automatic sprinkler head. Parmalee improved upon the Pratt patent and created a better sprinkler system. In 1874, he installed his fire sprinkler system into the piano factory that he owned.

Until the 1940s, sprinklers were installed almost exclusively for the protection of commercial buildings, whose owners were generally able to recoup their expenses with savings in insurance costs. Over the years, fire sprinklers have become mandatory safety equipment, and are required by building codes to be placed in hospitals, schools, hotels and other public buildings.

Fire Fighting Equipment



- On February 10, 1863, the fire extinguisher was patented by Alanson Crane.
- On Jan. 1, 1853, the first practical fire engine was tested in Cincinnati, Ohio.
- On April 21, 1878, the nation's first firehouse pole was installed in New York City.
- On May 30, 1821, the first rubber-lined cotton web fire hose was patented by Joseph Boyd of Boston.
- On May 7, 1878, the fire escape ladder was patented by [Joseph Winters](#).
- On November 11, 1890, [Daniel McCree](#) of Chicago invented a portable fire escape ladder (U.S. Patent #440,322 - see below).
- During World War II, [Percy Julian](#) used a soy protein to produce AeroFoam, which suffocates gasoline and oil fires.
- [Photo](#) 1860 Fire Hose Reel

Fire Departments

The history of the fire service in the United States begins in New Amsterdam (later called New York).

Smoke Detectors

There are two types of smoke detector: photoelectric and ionization. The first battery-operated home smoke detector was patented in 1969 by Randolph Smith and Kenneth House.

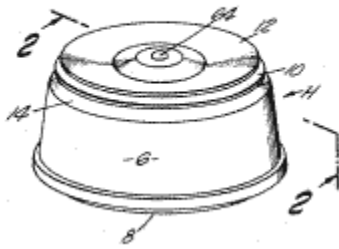


FIG. 1.

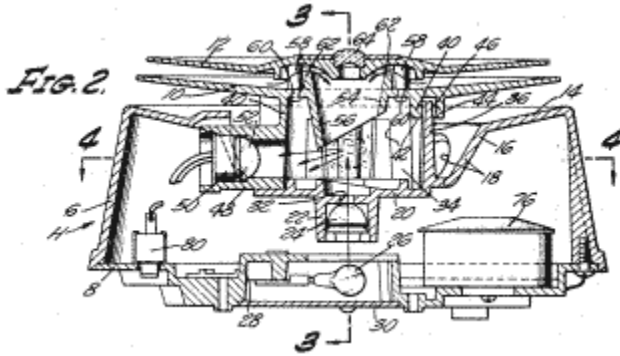


FIG. 2.