

EARLY FIRE APPARATUS.

Boston Had the First Engine on This Continent.

John and Thomas Hill of This City Built One in 1733.

From That Time on Many More Were Constructed Here.

For a great many years the United States has led the world in the science of fire-fighting and the invention and improvement of fire apparatus and equipment.

Boston has either led in the adoption and use of the latest fire machinery, or it has been among the first to do so.

Boston possessed the first fire engine on this continent, which it imported from London in 1678. It had six engines when Philadelphia, the second city to possess one, purchased its first in 1718. New York was third in 1732, Salem fourth in 1749 and Baltimore fifth in 1763.

All of these engines were small affairs, without either suction or leading hose, and were built by Richard Newsham of London, who built nearly all the fire engines used in the world at that time.

Only one of these engines is known to be in existence at the present time, the one built in 1749 for Salem, or, rather, for Richard Derby of that place, who presented it to the town.

It was in active service there for many years, and a number of years ago was presented to a Philadelphia fire company, and is now in possession of the Veteran firemen's association, of that city, and is on public exhibition at their headquarters. It is the oldest piece of fire apparatus on this continent.

The first American fire engine was built by John and Thomas Hill of Boston in 1733, the next by Anthony Nichols of Philadelphia in 1735, and by William Lindsay of New York in 1737, none of which was a success, and none was ever in the service of either of the places named.

As early as 1654, Boston, then 21 years old, gave its selectmen authority to purchase of Joseph Jenks of Lynn five engines, but there is no record that the engines were purchased or that Mr Jenks ever built an engine.

The first successful American fire engine was built by Thomas Loto of New York in 1743 and was used by No. 3 engine company for a number of years. Other fire engines of that city were also built by him.

Capt David Wheeler of Boston, a skilled blacksmith and the original lightning rod man, built the second successful fire engine in 1765, which he, jointly with John Green, presented to the city. It was known as Green, No. 10, afterward Brooks, No. 11, and was located in Bedford st. Capt Wheeler, who had previously been foreman of one of the companies using a Newsham engine, was appointed foreman of the company selected to man this one, and its first service was to extinguish a fire in his own dwelling.

In 1767, the year after Capt Wheeler built his first engine, the town by vote prohibited the further importation of fire engines, as the Wheeler machine was considered the equal of those manufactured abroad.

Richard Mason of Philadelphia invented and commenced the manufacture of hand engines in 1778 and by him and his successors, Mason & Gibbs, John Agnew and Jacob B. Haupt continued their manufacture until steam superseded hand engines just before and during the civil war. This concern built what is known as the "Philadelphia," or double-deck engine and was the first of several firms to do so.

Edward Thayer of Boston commenced to build fire engines about 1790 and continued until 1849. All of Berton's engines the first part of this century were built by him and many throughout New England by him and his successors, Edward, L. G. and Stephen Thayer. Howard & Davis, manufacturers of clocks and balances, were Thayer's successors in 1849, although they built an entirely different machine and continued in the business only a few years, when they abandoned it for the clock and watch business.

W. C. Hunneman established a fire engine business in Roxbury in 1792 and his descendants continued for a century lacking a few years. More Hunneman hand engines were built than those of any other pattern, and they went to all parts of the civilized world and many are in active service at the present time, some of which were made three-quarters of a century ago.

The first successful suction fire engine, the Hydraulion No. 1 of Providence, R. I. was invented and built by Sellers & Pennock of Philadelphia in 1822, and was one of the world wonders of that time. People came in large numbers from all sections to see it work. Through the efforts of Boston's second mayor, Josiah Quincy, this city was one of the first to adopt them, and in a few years none but suction engines were made.

Four years before the Hydraulion its builders had invented the first successful leading hose, which was made of leather and copper riveted, and this, with suction engines, completely revolutionized the fire service of the country and abolished the old bucket system, which had held sway for upward of 200 years.

Philadelphia used the first leading hose in 1791, but it was not successful, and Boston had one in 1798, which was also a failure. The firemen were opposed to leading hose because it placed the engines so far away from the fire that they could not see it burn.

Prior to this time all the hand engines were stationed as near as possible to the fire, the tub of the engine filled with water by bucket passers from the nearest water supply, and, through a short metal pipe attached to the engine, pumped on the flames, a crude system, necessitating all the available men and frequently women and children to operate it.

More of the engines had a gallery in the center, in the top of which was the play pipe, called the goose neck, and here the pipeman stood and directed the stream. This gave the name to the gooseneck engines, most of which were built in New York and Philadelphia, many of which are in existence at the present time.

The principle of the earliest hand engines was the box or tub, which was filled with water, and from the first to the present time hand engines have always been called "tubs."

With suction engines and leading hose came lines of hand engines, one playing into another, instead of lines of bucket passers, when the water supply was some distance from the fire, as it frequently was, as water supply systems were then very few and inefficient.

When such lines were formed, sometimes with a number of engines in line, each company would endeavor to wash another by giving it more water than it could take care of, which overflowed and washed the outside of the engine; or to pass more water than it was receiving and suck air, and to either wash or suck another engine, which was then as great a victory as it is now to win the championship at long distance playing.

Soon the contests developed into challenge contests, of which the hand engine musters of the past half century are the result.

The first steam fire engine was built by George Braithwait of London in 1829 and the second by Paul Hodgo of New York, neither of which was a success. The first was designed by Capt John Ericsson of Ironclad monitor fame.

The first successful steam fire engine was built by Miles Greenwood of Cincinnati in 1852 from designs made by Moses Latta and named the Uncle Joe Ross, in honor of the alderman who introduced the order for its purchase.

Boston was the first city outside of Cincinnati to recognize the merits of steam in fire service, and in 1855 purchased of A. B. & E. Latta, Mr Greenwood's successors, a steam fire engine similar to the Uncle Joe Ross at a cost of \$9000. It was named the Miles Greenwood in honor of the father of steam fire engines.

This engine was not a success, owing to its excessive weight, between seven and eight tons, although it did excellent service at three large fires, Grrish market, April 12; Gray's wharf, July 2, and North st, July 29, 1856.

It demonstrated that steam was superior to muscle in operating fire engines, and in 1858 the city council authorized a competitive test of steam fire engines for prizes of \$500, \$300 and \$200, contributed by insurance companies.

This test took place on the common, Aug 31, with four contestants, the Elisha Smith, built by George W. Bird & Co, East Boston; New Era, by the Boston locomotive works; Lawrence, by Scott & Bean of Lawrence; and Philadelphia, by Reanie & Neale of Philadelphia.

There were a number of tests and the judges awarded the first prize to the

Philadelphia, the second to Lawrence and the third to Elisha Smith.

In December, 1858, two steam fire engines, Eclipse No. 6 and Lawrence No. 7, went into service by contract with their builders, and during 1859 and 1860 the entire Boston department was changed from hand to steam, and was the first municipal steam fire department on the face of the globe, antedating Cincinnati by several years.

Boston was the first to have an electric fire alarm telegraph system, and the first fire alarm ever given by electricity was from station 7 on the old Cooper st church at 8.30 p m, April 29, 1852.

New York had the first insurance protective brigade in 1839, Boston the second in 1859.

Boston had the first fire boat Jan 1, 1871, the first modern hose wagon in 1881, and was the first city to use portable fire extinguishers in 1869. New York had the first horse chemical engine in 1872, which it early abandoned because it was supposed that it would supersede steam fire engines and throw a large number of firemen out of work. Boston had its first horse chemical in 1873, and was the first city to make them a success and keep them in constant use.

Boston and New York first used self-propelling or horseless engines at the same time, in 1872, and both abandoned them after a trial. New York at one time had five in service. Chicago, Detroit, Milwaukee, Pon du Lac, Brooklyn and Hartford all tried and abandoned them, except Hartford. Boston readopted them in 1897.

Boston used the first fabric hose in 1857, St Joseph, Mo, the first swinging harness in 1871, New York the first water tower in 1879, Boston the second in March, 1882; Chicago the first sliding pole in 1878, Somerville the first combination apparatus in 1884, New York the first aerial truck (Hayes) in 1868 (the first ordinary ladder truck in 1722), and Boston the second in 1820.

St Louis had the first pomper or life-saving brigade in 1877, Boston had the first veteran firemen's association in 1833, Cincinnati the first full paid fire department, commencing in 1852, and New York the second in 1865, Ashland the first firemen's muster in 1849, and Fall River the first horse stalls with folding doors opening into the apparatus room about 1870.

Philadelphia had the first hose company in 1803, which used a vehicle similar to the present hose wagon, except that it was hauled by hand. That city also had the first hose reel in 1809.

San Francisco is the only large city that has a call force at the present time.