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Here are the Blake Brothers early “Cylindrical Door Locks” represented in their 1833 Patent # X7945H. There is one fully functional set and one partial set

There are several unique things about this door lock.

First off, the design was nearly 100 years ahead of its time when compared to the mid-1920's patents of Walter Schlage. The Blake brothers designed this door knob and locking mechanism at a time when the norm was wooden stock locks and metal plate rim locks.

Secondly, this lock was primarily designed by a man named Eli Whitney Blake who just happened to be the favorite nephew of Eli Whitney. Some of you may recognize him as the inventor of the cotton gin! I guess creativity tends to run in families.

Not too much is known about this patent, as all but the drawing escaped the US Patent Office Fire of 1836.

There is at least one additional example of this lock set in the Enfield Shaker Museum in Enfield, New Hampshire USA, but I have never seen one outside of two books which I own.

Additional photographs courtesy of:

“Locks and Lockmakers of America”, by Thomas F. Hennessy - Copyright 1976, 1997.

“Inventing a Better Mousetrap: 200 Years of American History in the Amazing World of Patent Models”, by Alan Rothschild and Ann Rothschild - Copyright 2015.

https://en.m.wikipedia.org/wiki/Eli_Whitney_Blake

<https://museumcollection.hagley.org/objects/46520>

#LOCKHISTORY #ELIWHITNEYBLAKE #DOORLOCK

ELI WHITNEY BLAKE (1795-1886)

The first lock company in New Haven, CT was Blake Bros. Co., started in 1833 by three brothers, Eli Whitney Blake, Philos Blake, and John Blake, nephews of Eli Whitney, the inventor of the cotton gin. (See Chapter 3, Alcohol, Tobacco, and Firearms for information about Eli Whitney and his inventions.)

Eli Whitney (E.W.) Blake came to New Haven from Westborough, MA to attend Yale University. His uncle assumed the cost of his college education. Blake graduated from Yale in 1816 and went on to study law in Litchfield, CT. He returned to New Haven after receiving his law degree and became a lawyer but left the practice of law when his uncle, Eli Whitney, asked for Blake's help in running his gun factory in Whitneyville, CT. Blake made improvements in the machinery and the process of manufacturing arms. After Whitney's death in 1825, E.W. Blake and his brother Philos managed the business, and in 1836, they were joined by their brother, John.

The Blake brothers were all mechanically inclined and started their own business in the field of lock making. While still operating the Whitney Armory, they invented a new type of escutcheon door lock, and began to produce the door locks, latches, and other hardware that they invented. Their company was the first to introduce "mortise" locks and latches which are inserted in the body of the door, superseding the previous clumsy and



Figure 2: Portrait of Eli Whitney Blake

disfiguring "box" locks and latches of English manufacture, which were affixed to the surface of the door. Their company was also a leader in the manufacture of carriage hardware.

In 1852, E.W. Blake was appointed to supervise the paving of the city streets in New Haven, CT. At the time, there were not a dozen miles of macadam road in all of New England. Blake became aware of the need for a machine to break stone, finding that the only method used to break stone into fragments was by hand-held hammers, costing two days worth of labor to produce only a cubic yard of road metal and this "... in coarser fragments than was desirable for a good road-bed." He wanted

to develop something that could act on a considerable number of stones of different sizes and shapes at the same time, and then automatically remove the fragments when they reached the desired size. In 1858, he invented the first stone and rock crushing machine to provide material to build the nation's first paved roadways. Blake's solution was a pair of upright jaws converging downwards. The space between them at the top was large enough to receive the stones to be broken, and the space at the bottom was small enough to let the resulting fragments escape. The machine operated by "imparting to one of the jaws a short and powerful vibratory movement." This achievement earned Eli Whitney Blake the title, "Father of the American Road System." (Figures 2 and 3)



ESCUTCHEON LATCH, PATENT NO. 7945.5X

Eli Whitney Blake, Philos Blake, John Blake,
New Haven, Connecticut, December 31, 1833

A latch and bolt that substitute for a mortise latch and bolt. The latch's round shank receives a spiral spring that actuates the bolt. The bolt passes through a square hole in a plate on the edge of the door. The round hole through the door has its center exactly opposite to the center of the bolt, forming the chamber which receives the tumbler. The chamber is covered on each side of the door by an escutcheon plate.



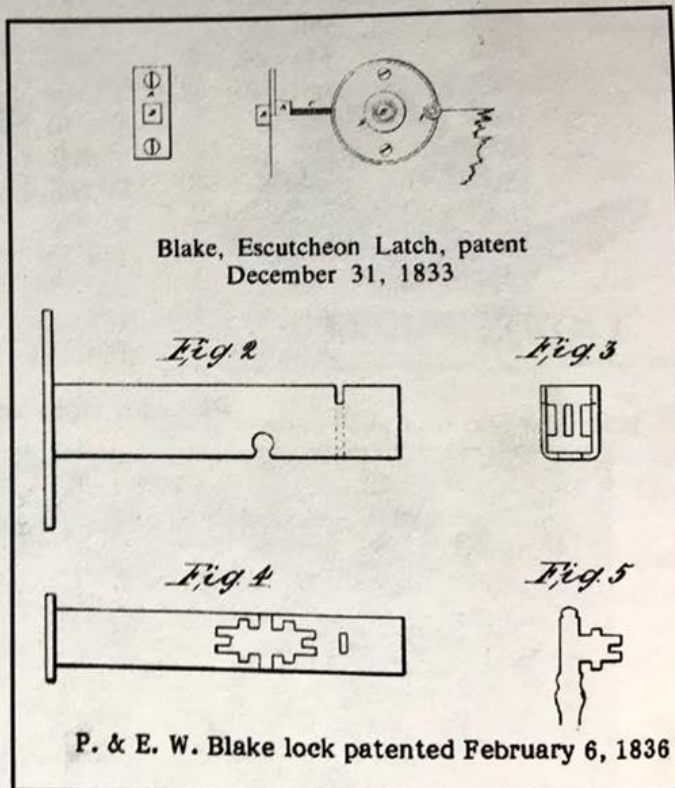
THE LOCK COMPANIES OF NEW HAVEN

New Haven, Connecticut, home of Yale University and Eli Whitney, inventor of the cotton gin, was also well-known for the many lock manufacturers of the city.

BLAKE BROS. CO.

The first lock company in New Haven was started in 1833, and was called Blake Bros. Co. This firm was established by three brothers, all nephews of Eli Whitney. They were Eli Whitney Blake, Philo Blake and John Blake. Eli Whitney Blake came to New Haven from his home in Westborough, Massachusetts, to attend Yale University. He graduated from Yale in 1816, and then studied law under Judge Gould in the first law school in America, which was located in Litchfield, Connecticut. Blake returned to New Haven after receiving his law degree and started to practice law. In 1823, Eli Whitney's health began to fail and he called upon his nephew, Eli Whitney Blake, to take over control of the Whitney Armory. Blake's two brothers, Philo and John, also joined him in running this Armory. Eli Whitney died in 1825 and the Blake Brothers assumed control of the Armory. Whitney had a son, Eli Whitney, 2nd, but he was too young to take over after his father's death.

The Blake brothers continued to run the Armory until 1833 when Henry Edwards, former governor of the state and executor of Whitney's estate, assumed charge of the Whitney Armory. Later in 1842, Eli Whitney, 2nd, after graduating from Princeton, took over the Armory.



The Blake brothers were all mechanically inclined and interested in starting a business of their own. They chose the field of lockmaking. While still operating the Whitney Armory, they invented an entirely new type of door latch. In 1834, there appeared the following newspaper advertisement:

“Escutcheon Latches
Manufactured By
Blake Bros.

“The subscribers have now on hand a complete assortment of the above — much approved — latches — of the several varieties suited to any thickness of door — for sale at wholesale or retail by Coley & Smith, 11 Chapel, New Haven, Connecticut. March 23, 1834.”

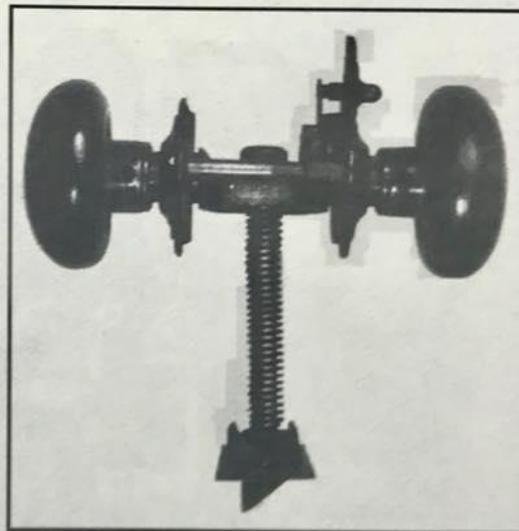
Most of the locks made by the Blake Bros. Co. were sold to the local market through this company. This company was also a leader in the manufacture of carriage hardware.

In 1878 the name of this company was changed to Blake Bros. Hardware Co. Their products then consisted of builders' and other hardware, iron, brass, and bronze castings made to order, and a stone crusher. Their main office was located at 85 Orange Street in New Haven. This company went out of business in 1880. Eli Whitney Blake died in New Haven in 1886 at the age of ninety-one.

CYLINDRICAL LOCK

On December 31, 1833, P., E.W. and J.A. Blake, New Haven, Connecticut, received a patent on a revolutionary type lock which was the forerunner of the present day cylindrical lock. This lock was not operated by key, but could be locked on the inside by pushing a locking button. Up until this time, practically every lock made was of the rim type which was mounted to the door. This new type lock fit inside the door and required boring only two holes in the door. A large hole was bored through the door for the lock and door knob mechanism, and a smaller hole was drilled from the face of the door to meet this large hole for the latch mechanism. This type lock was almost one hundred years ahead of its time as it did not become popular in the lock industry until the 1930's.

The lock was a marvel in function, design and workmanship for such an early period in American industry. The two major trades which had achieved this advancement in America at this time were the clockmakers and the gunsmiths. The lock was made almost exclusively of cast and wrought iron with the exception of the wooden knobs, springs, brass locking button and knob shanks.



**Escutcheon Latch by Blake Bros.,
New Haven, Connecticut, December
31, 1833. Refer to page 49.**

7945 1/2 X

P. E. W. & J. A. Blake,

Latch.

Patented Dec. 31, 1833.

