

Eli Josiah Manville

1823- 1886

"He was one of the most prominent of the mechanical experts of the state and did more for the mechanical development of the valley perhaps than any other man."

- William J. Pape, *History of Waterbury, Volume III, 1918*

Eli J. Manville invented and manufactured machinery that remains influential in the 21st century. His machinery made it possible to mass-produce safety pins, and the company he founded in Waterbury produced vital machinery for countless other companies.

Manville was born in Watertown, CT on March 13, 1823, the son of Cyrus B. and Polly (Hickox) Manville. The Manvilles were farmers, but Eli preferred to study mechanics, building a water wheel on the family farm at an early age.

He learned the machinist's trade in Naugatuck during the 1840s, working for Warner and Isbell, manufacturers of machinery for carding wool. He also worked briefly at the Springfield (MA) Armory, manufacturer of U.S. military firearms, where he perfected his knowledge of machinery.

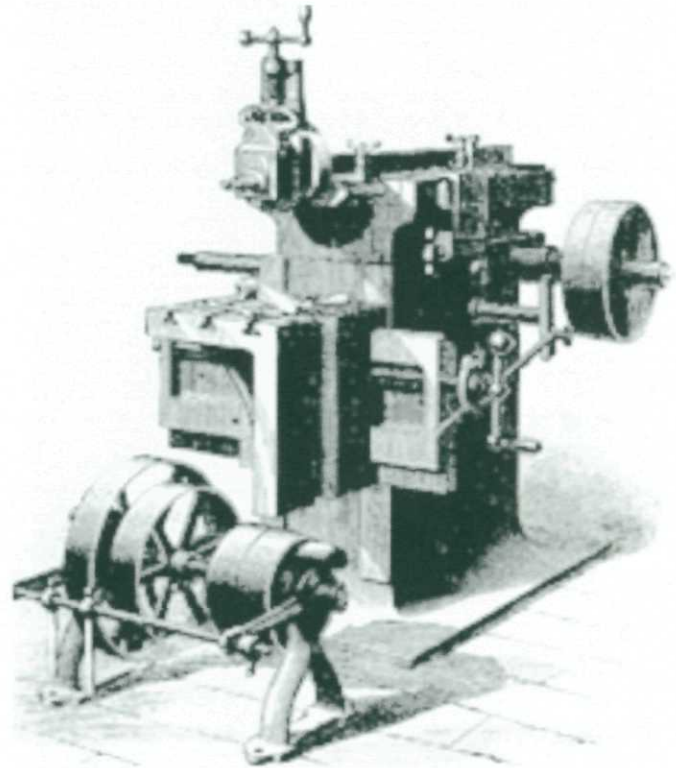
Manville moved to Waterbury in 1852, working for several companies over the next few years. He acquired a gas and steam pipe business in 1856, selling it three years later to dedicate his time to the machinist's trade. During the Civil War, he worked for Blake & Johnson as superintendent of their machinery department. While there, he perfected the first cartridge heading machine, which was sold to Winchester Arms Company.

He patented numerous inventions, most of which were improvements to machinery that made products from metal wire. These inventions stemmed from his earlier work as superintendent at the New England Buckle Company in Waterbury. His first design for what is known today as his Four-Slide machine was developed there in 1855. The Four-Slide machine, also called the Four-Way Automatic Wire Forming machine, automatically cuts and shapes wires into a wide variety of forms. It was the first machine capable of producing safety pins on a large scale. Manville made numerous improvements to it over the course of two decades.

The Hendy Machine Company of Torrington produced several types of machines based on Manville's patents during the early 1870s. After the Civil War, Manville had worked closely with the company founders, who subsequently made use of some of his patents. The most successful was the "Manville Shaper," patented in 1875, which received high praise in an 1878 Report of the U. S. Naval Commission, following a thorough testing of the machine.

In 1878, Manville established his own business, producing machinery based on his inventions. The E. J. Manville Machine Company was a family business, operating out of Manville's home on the corner of Meadow and Benedict Streets (now part of the Home Depot shopping plaza). During the 1870s, Manville's five sons - all machinists and tool makers - divided their time between helping their father with his business and working for more established manufacturers. By the early 1880s, four of them were employed by his rapidly growing company, which relocated to one floor of a nearby factory in 1882, and took over an entire building in 1887.

Eli Manville died following a long illness on October 30, 1886. His son Robert Cyrus Manville became president of the company, which had incorporated only a few weeks before



The Manville Shaper

Eli's death.

Robert and his brother Frank B. Manville inherited their father's inventive genius, patenting numerous machines for their company and others. In 1894, Frank Manville was granted a patent for producing eyelets (small metal pieces used, for example, to reinforce shoelace holes) through a series of shaping punches. This invention helped give rise to the eyelet industry which has flourished in the Naugatuck Valley. Eyelets in the 21st century are used by the aerospace, medical, lighting, automotive and various other industries.

The E. J. Manville Machine Company continued to produce machinery long after its founder's death. It was acquired by the National Machinery Company of Ohio in 1944. National continued to produce Manville machinery and supplied repair parts until the mid 1960s. Many of Eli Manville's machines, with modifications, are still in use today. Newer versions of the Four-Slide machine are used to produce small parts, such as pins, clips, and contacts, for use in the medical, electronics, semi-conductor, and computer industries.