## D. MARY PENNINGTON

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Mary Engle Pennington, 1872-1952

Mary Pennington was born on 8 October, 1872, in Nashville, Tennessee, but shortly thereafter she moved with her parents to Philadelphia, Pennsylvania, to be closer to her mother's Quaker relatives. Mary showed an early interest in chemistry and in 1890 she entered the University of Pennsylvania where, in 1892, she completed the requirements for a BS Degree in Chemistry and Minors in Botany and Zoology. [The University did not grant degrees to women at this time and instead she was given a Certificate of Proficiency].

However, she went on to receive her Ph.D from the University of Pennsylvania in 1895 and was a University Fellow in Botany in 1895-96. She did research, from 1897 to 1899, in physiological chemistry at Yale. In 1898, Pennington accepted a position as Director of the Clinical Laboratory with the Women's Medical College of Pennsylvania. From 1898 to 1901 she also served in the Department of Hygiene at Pennsylvania and was a Bacteriologist with the Philadelphia Bureau of Health where she raised sanitation standards for the handling of milk and milk products.

In 1905, Pennington started work as a Bacteriological Chemist for the US Department of Agriculture. When in 1907, the Food Research Laboratory was created she was appointed as Chief and developed standards for the processing of chickens. She also became head of the investigation into the design of refrigerated railway boxcars and, during World War I, served on Herbert Hoover's War Food Administration.

It was this involvement with boxcar design that led to her interest in the entire process of transporting and storing perishable foods and into both refrigerated transport and home refrigeration. In 1922, Pennington moved to work for a private firm on insulation for refrigeration units. Leaving in 1922, she started her own consulting business which she ran until her retirement in 1952.

Pennington founded the Household Refrigeration Bureau in 1923 with much of her work supported by the National Association of Ice Industries and she published pamphlets on home food safety. She contributed papers to many scientific and medical journals and belonged to numerous professional societies. She was awarded the Garvin-Olin Medal, the highest honour given to women, by the American Chemical Society. She was also inducted into both the National Women's Hall of Fame and the ASHRAE Hall of Fame. Dr Mary Engle Pennington died on 27 September, 1952.



University of Pennsylvania



Mary Pennington in about 1890



Dr Pennington



Dr Pennington carrying out experiments on refrigerated railway boxcars



Typical railway boxcar with ice cooling system, about 1940



A lecture at the Household Refrigeration School around 1928



Portrait of Dr Pennington



Dr Mary Engle Pennington in 1940

## References

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