

ACI 124.2R-94

The Mercer Mile Buildings

Reported by ACI Committee 124



american concrete institute

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The Mercer Mile consists of three historic concrete buildings within a mile (1.6 km) of each other, built by Henry Chapman Mercer near Doylestown, in Bucks County, Pennsylvania. The first to be built, starting in 1908, was Fonthill, Mercer's 44-room mansion. The second, the Moravian Pottery and Tile Works, was and is a factory producing ornamental tiles for architectural and other purposes. The last and largest structure, completed in 1916, was the Mercer Museum, built to house Mercer's collection of more than 30,000 tools and objects from Early American and Native American society. The collection totals 50,000 objects today. Mercer acted as both architect and builder and his unique plans and bold construction techniques made him a pioneer in the use of concrete. Built-in concrete furniture, concrete window mullions, and concrete roofs and dovescotes are but a few of the remarkable details that Mercer incorporated. The published report includes two sets of 20 photographs each; the first covers Fonthill, Mercer's home; the second covers both the tile works and museum.

Keywords: aesthetics, archaeology, cast-in-place concrete, columns, Fonthill, history, Mercer, Henry C.; Mercer Mile, Mercer Museum, Moravian Pottery, reinforced concrete, roofs, tile works, vaults, walls, window mullions.

INTRODUCTION

Henry Chapman Mercer (1856-1930) received considerable fame for his achievements in the fields of archaeology, anthropology, ceramics, and historical research. Mercer was a multi-talented man with imagination, a highly developed artistic sense, and a wealth of historical knowledge.

He inherited his estate and considerable wealth which gave him the freedom and means to apply his many talents to special interests. He also had a favorite aunt who was wealthy and helped to back many of his later enterprises.

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Mercer graduated from Harvard in 1879 with a B.A. and soon thereafter became curator of American and prehistoric archaeology at the University of Pennsylvania. He was an avid reader and scholar.

Although not trained as an architect, Mercer was able to design and personally oversee the building of Fonhill, the Moravian Pottery and Tile Works, and the Mercer Museum. This was an amazing achievement, given the time in the very early 20th century and the fact that he used unskilled labor from the surrounding town and countryside. In October 1960, referring to Fonhill, *Progressive Architecture* stated: "Though the effect is often weird and theatrical, this building with its unique spatial plan and frank and bold construction techniques should establish Henry Chapman Mercer as one of the fore-runners of the modern movement in architecture. His work is particularly apropos today in the light of recent architectural trends, and the 'discovery' of the plasticity of concrete by modern masters."

Mercer Mile I: Mercer's Home, Fonhill

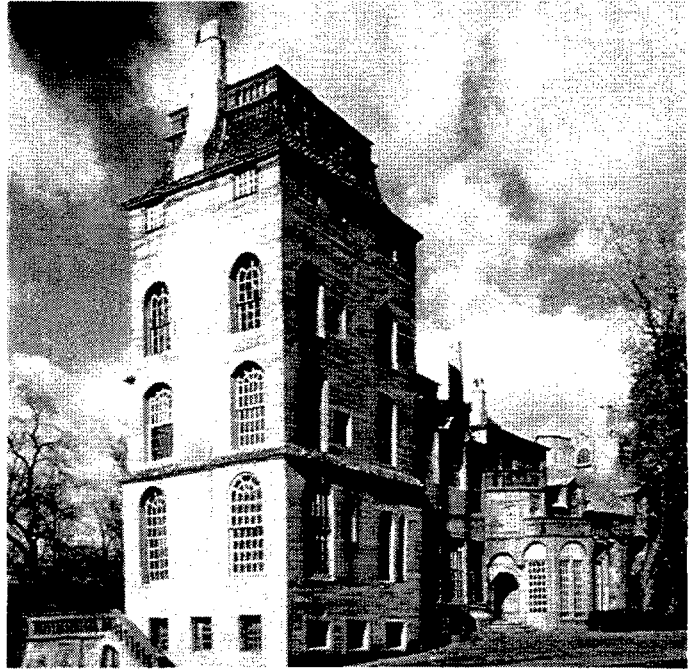


Fig. 1.2—The first building was Fonhill, Dr. Mercer's 44 room mansion. It was started in 1908 when Dr. Mercer was 52; exterior construction was completed in 1910. His material of choice was cast-in-place reinforced concrete, a medium that architects of that time were just beginning to re-discover.



Fig. 1.1—This is Dr. Henry Chapman Mercer, a unique individual whose innovative concrete construction techniques, were half a century ahead of his time. He designed and built three medieval-looking buildings, all within a mile (1.6 km) of each other, on the outskirts of Doylestown in the heart of Bucks County, Pennsylvania.

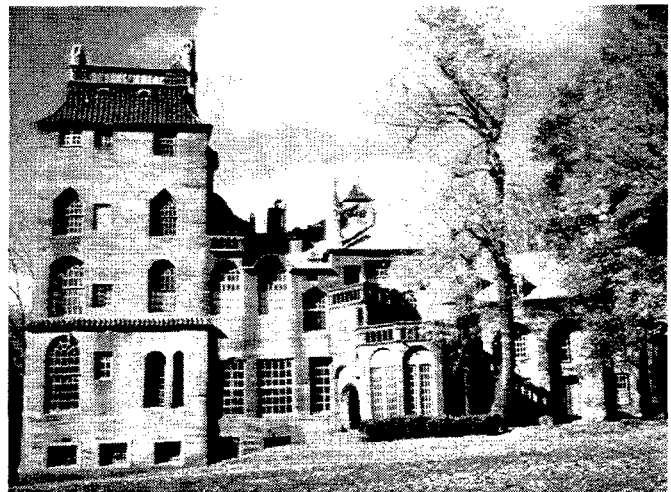


Fig. 1.3—The house was designed as a showcase for Dr. Mercer's pottery, tiles, and assorted other treasures. Originally blocks of clay were piled on a table and modeled into a general outline. After many changes a plaster model was made to scale and used as a guide for construction of the house.

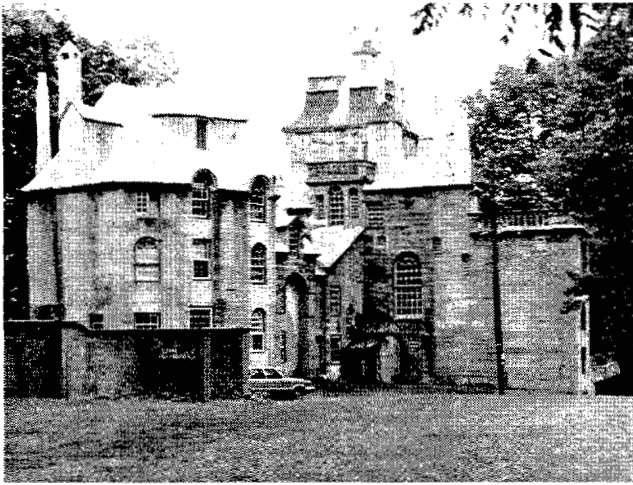


Fig. 1.4—This rear view of Fonthill reveals a design reminiscent of a medieval castle. The turrets, towers and multi-faceted levels are an expression of Henry Mercer's individual taste. The house was planned, room for room, entirely from the interior, the exterior not being considered until all rooms had been imagined and sketched.



Fig. 1.6—Of the three Mercer buildings his home is the favorite of many visitors because it is the most personal. The remarkable structure actually envelops a small 18th century farmhouse, literally encasing it with concrete. This slide shows that portion of Fonthill.



Fig. 1.5—Note the abundance of windows of widely differing styles. The house was wired for electricity at the time of construction but Mercer preferred kerosene and oil lamps. The windows were so arranged to direct daylight into specific corners, or down a hallway, wherever deemed necessary.



Fig. 1.7—This is the arched passageway from the saloon (living room) to the library. Above the stepped arch is a framed engraving. To the right more tiles, well lighted from the window on the left. Note that the window is on a nonal wall, typical of Mercer's unusual sense of design.