

THE CIRCULAR STAIRCASE AT THE Stebbins House: A Restoration Study

by Michael Emmons

CURRENTLY AT HISTORIC DEERFIELD, we are undertaking an exciting restoration study at the Asa and Emilia Stebbins House (c. 1799). This includes a careful investigation to determine which architectural features are original and which might be a product of later alterations—some perhaps carried out by the Stebbins family during their earliest years in the house. Research into the archival documentation has so far revealed little to help answer questions about the house's construction and evolution, so we will necessarily depend on a thorough and meticulous investigation of the building's material fabric, through a process sometimes referred to as "building archaeology." The Stebbins House itself thus emerges as the most important historical document in our restoration study, an artifact that must be "read"—its stories embedded in its bricks, paint layers, nails, plaster lines, saw marks, floorboards, wear patterns, and molding profiles, all of which serve as critical evidence of the property's history. With the house closed and emptied of its collections for the restoration project, we can now take a closer look than ever before. It is an exciting process, with every new discovery hinting at the additional stories to be told. We look forward to sharing more about this investigation with visitors and supporters in the months ahead.



The circular shape of the wall surrounding the Stebbins House's "flying staircase" is more easily apparent when viewed from above. Arches and circular features were common in Federal-era architecture.

No matter our final conclusions about the exact periodization of the Stebbins House, we know that several of its early architectural features were bold and aspirational, especially considering its rural village context. The Stebbins House has long been recognized for a couple of "firsts" in Deerfield: it was the first brick house built in the area, for example, and evidence suggests it boasted the first dedicated dining room in the village. It was also novel because its architectural design signaled locally the stylistic transition occurring throughout the young United States, from Georgian architecture to a newer design mode now called Federal or Adamesque. Several design features of the house are markers of this gradual transition.

Many of the most forward-looking features at the Stebbins House reflect the increasing tendency of skilled master builders to draw upon a growing body of architectural pattern books published in England and the United States. The use of such pattern books strongly influenced architectural design across the nation, and fortunately for us, left behind valuable evidence to be studied by later historians. Comparing period pattern books with some of the unique features at the Stebbins House, such as the south parlor's elaborate ornamental plasterwork, helps us determine their possible



The circular “flying staircase” in the entry hallway of the Asa Stebbins House at Historic Deerfield. The wallpaper in the hallway was recently removed for the restoration work.

design origins. The fireplace in that same room features an unusual mantle with bulbous, curved legs sitting upon small spheres, possibly inspired by a couple of similar models found in architecture books of the period. That fireplace also

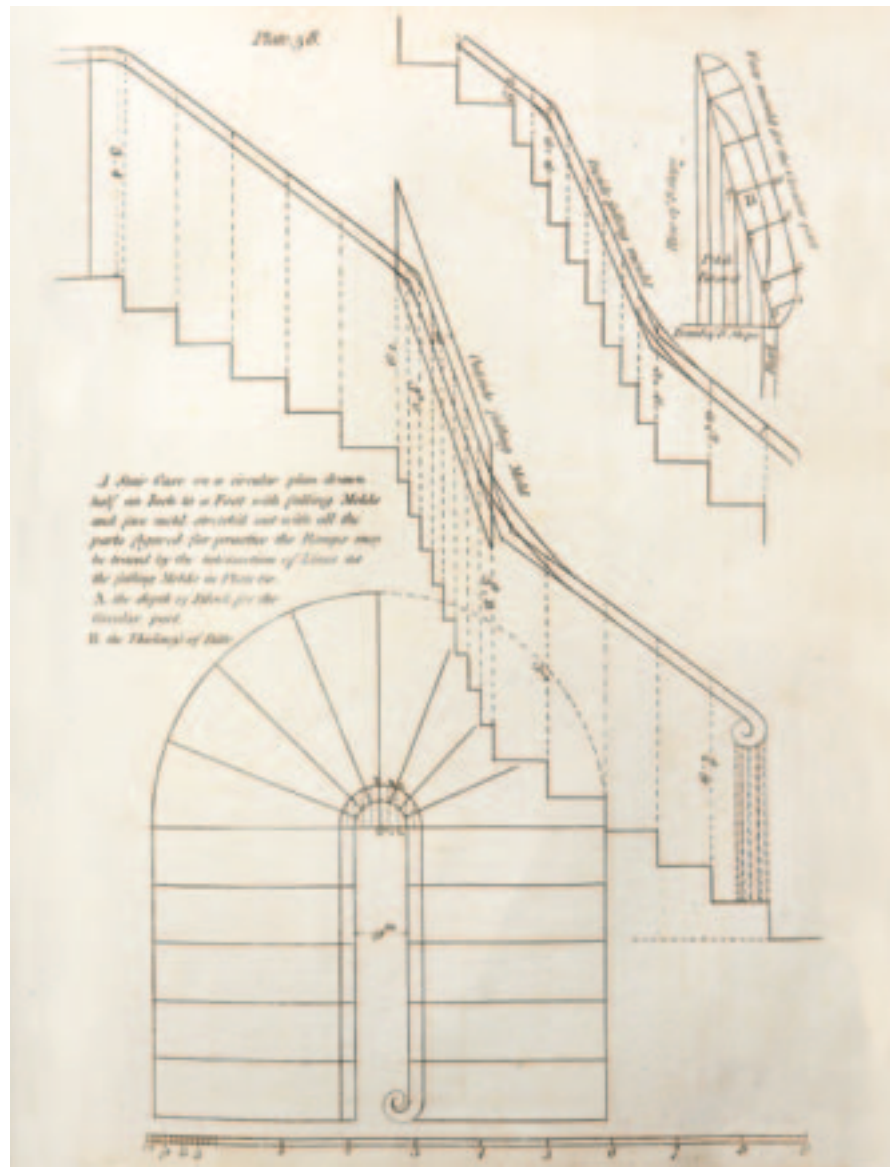
features a unique brick firebox configuration that seems to reflect a design published just a couple years earlier in Benjamin’s *The Country Builder’s Assistant* (an observation made years ago by Bill Flynt, Historic Deerfield’s longtime

Architectural Conservator). A builder’s guide may have also enabled what is arguably the most ambitious architectural feature at the Stebbins House—the circular staircase in the front hallway, a self-supporting structure sometimes called a

“flying staircase.” This curving stairway is nested within a circular wall (reflecting a new Federal-era emphasis on circles and curves) and winds gracefully upwards with no visible support underneath. There are no other staircases quite like it in Deerfield.

The circular staircase at the Stebbins House is a highly complex assemblage, one that required an intricate and coordinated dance among dozens of inter-related structural and finish elements. The nature of a circular stairway, which turns laterally while also rising in elevation, made it a real challenge to design and construct. The skilled joiner who built the staircase needed to employ mathematical calculations and lots of geometrical sketches to create what is likely a one-of-a-kind architectural feature. The staircase is composed of a thick, wood-framed carriage structure, hidden from view but securely set into the thick, wood plank walls and the rear brick wall that surround it. Atop this heavy framing, stair treads, risers, balusters, stringboards, spiral-shaped moldings, a newel post, and a gradually twisting handrail all had to be shaped to fit their particular location on the stairway, with the unique contours of that location in the assemblage. At multiple points along the Stebbins circular stair, a few interruptions to the smooth “sweep” of the spiral effect—visible as sharp angles and noticeable seams in the face molding and handrail—hint at the difficulties faced by a country builder attempting an ambitious stairway design, possibly for the first time.

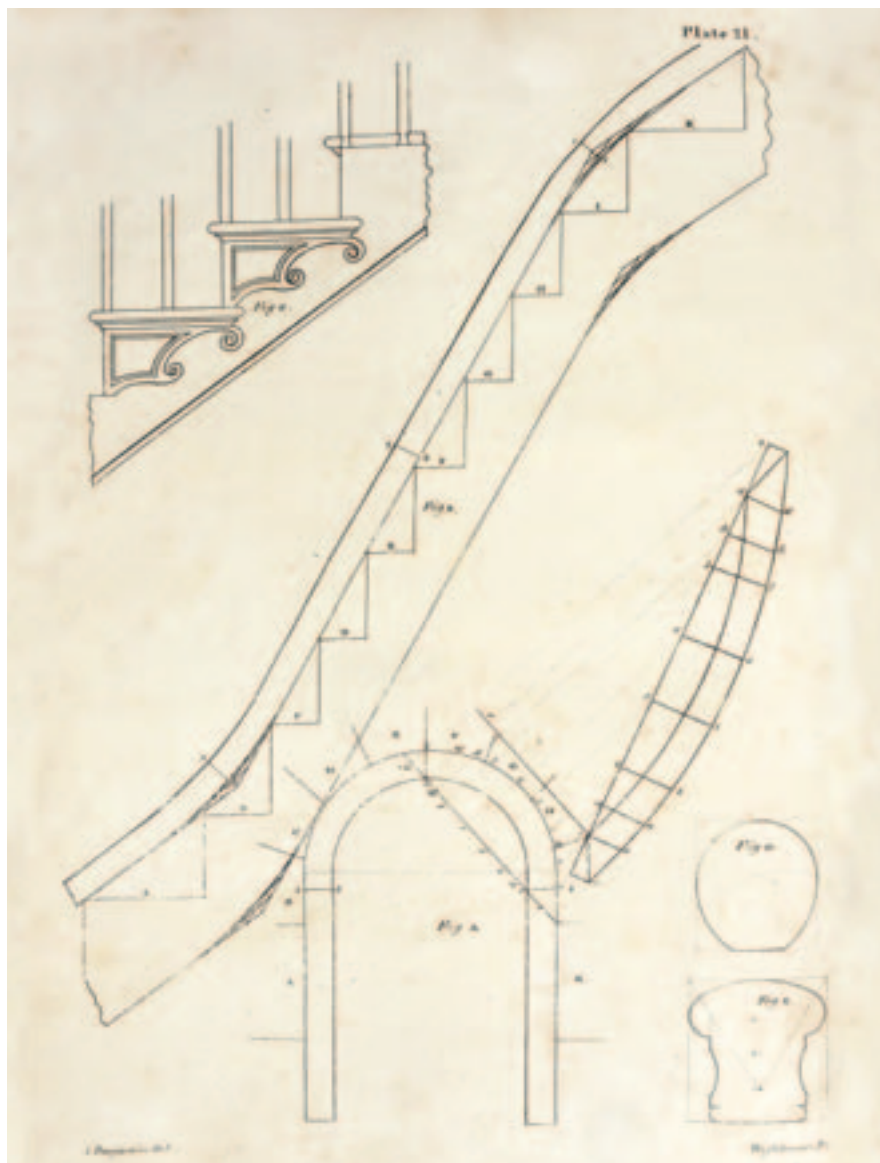
So how did the joiner at the Stebbins House work through such a challenging project? Guidance almost certainly came from a pattern book; but here in Deerfield, the design might have also been informed by direct experience with a similar staircase just a few miles away. The Coleman House in nearby



Pain's “Stair Case on a circular plan” provided a model fairly similar to the staircase built in the Stebbins House, showing the configuration and measurements for stair treads, ramps, and moldings. *The Practical House Carpenter* (London, 1792). Historic Deerfield Library.

Greenfield, with its wider, sweeping, flying staircase, was designed and built by Asher Benjamin around 1796, a few years before work began on the Stebbins House. Though there is no evidence that Asher Benjamin himself was directly involved in the Stebbins House, the joiners he employed at the Coleman House—and at the first Deerfield Academy building in 1798—may have applied Benjamin's teachings on the Stebbins staircase.

Yet the dimensions and design of the Stebbins staircase differ in significant ways from the stairs at the Coleman House, and there can be little doubt that its designers were consulting a published treatise on architectural design to work out its configuration. We are currently studying period architecture books to investigate whether a particular publication might be directly tied to the design of the Stebbins staircase, which could also help us confirm its construction



Benjamin's designs for stairs and details, similar to Pain. *The American Builder's Companion* (Boston, 1806). Historic Deerfield Library.

date. Luckily, many editions of Asher Benjamin's own publications, as well as the English books he drew upon, can be found within the impressive collection of period architectural books owned by Historic Deerfield, many of which were generously donated to the Memorial Libraries by Peter Spang, the organization's founding curator.

Asher Benjamin's first book, *The Country Builder's Assistant*, was published in Greenfield a couple of years before the Stebbins family built their house. It

did not contain a full design for a circular staircase—though it did aid joiners in making “twist rails,” curtail steps, and other related elements. Benjamin did not include full guidelines for creating “circular stairs” until his 1806 book, *The American Builder's Companion*, several years after the Stebbins House construction. This does not mean that the Stebbins staircase was built later than 1799. He had created the circular staircase at the Coleman House a full decade earlier and another at the state capitol building

in Hartford, Connecticut, in 1795. Benjamin and his collaborator on the 1806 book, Daniel Raynerd (“architect and stucco worker”) were clearly sharing designs and motifs that they had already practiced building for years in the field, noting in the book's preface that “the principal part of our designs have been executed by our own hands.” Perhaps Benjamin's influence upon the Stebbins House stairway came not from direct involvement or even his own publications, but instead through his example—and also by orienting his associates towards existing books such as William Pain's *The Practical House Carpenter*. Pain's popular builders guide, which Benjamin often consulted and borrowed from, was published in many editions in London (including a 1792 version). It contained detailed illustrations of several full stairways, including a “Stair Case on a circular plan,” widely distributed years before Benjamin published his own examples.

No matter where the joiner at the Stebbins House learned to design the circular stair, it obviously required significant time and deliberation to engineer such an intricate and complicated structure. The expense of the project is plainly evident in the relatively small number of circular staircases built during the Federal period. Today the Stebbins House staircase stands as a powerful testament to the aspirations of Asa Stebbins. Having survived for more than two centuries, it is also a monument to the skill and care of the craftspeople who built it. We hope our investigation of the staircase—along with dozens of other architectural features at the house—will not only help us further understand the history of the Stebbins family but also allow us to better share with Historic Deerfield's visitors the rich and complex world they experienced.