UNITED STATES DEPARTMEN . JF THE INTERIOR NATIONAL PARK SERVICE

**INVENTORY -- NOMINATION FORM** 

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# NATIONAL REGISTER OF HISTORIC PLACES

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#### SEE INSTRUCTIONS IN HOW TO COMPLETE NATIONAL REGISTER FORMS TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

HISTORIC				
	anufacturing Comp	any		
AND/OR COMMON				
Boston Ma	anufacturing Comp	any		
LOCATION				
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## 7 **DESCRIPTION**

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DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

Construction of the Boston Manufacturing Company's first mill in Waltham began late in 1813 under the supervision of Paul Moody and continued until November, 1814. According to Kenneth Mailloux, principal historian of the company, additional pre-1850 mills were erected in 1816, 1821, and 1843. Three of these first four red brick mills--those finished in 1814, 1816, and 1843--are extant and connected end-to-end so that they form what amounts to a single four-story structure approximately 320 feet long and 45 feet wide. These attached buildings and the land between them and the Charles River constitute the nominated property. Neither the BMC raceway nor any other pre-1850 structure survives. Several buildings from the 1870's and 1880's stand nearby, and an 1852 mill abuts the 1816 factory at an angle, but none of these post-1850 edifices contributes to the national significance of the BMC and none possesses special architectural or engineering significance.

Secondary works describe the size of the first BMC mill as 90 by 45 feet, but according to a 1901 Associated Mutual Insurance Company map posted in the present boiler house, the initial mill measured only 80 by 43 feet. Work began on the basement of the historic structure in 1813, and as soon as construction crews finished that section, Moody set up a machine shop in it. Here he and Lowell labored over the design and fabrication of their innovative textile machines. Meanwhile after about a year, the entire building reached completion. Situated northwest to southeast alongside the Charles River, the mill rested on a granite block and stone rubble foundation, had a partially raised full basement, and rose three and one-half stories to a double-pitched or monitored roof. Along with the machine shop the basement contained space for the water wheel, which was installed under the supervision of Jacob Perkins. The first floor would hold the BMC's carding operation; the second, spinning; and the third and fourth, weaving.

Once the mill began operating and Lowell's textile manufacturing concepts proved successful, the BMC expanded. In 1816 it erected a similarly designed and constructed mill about 90 feet southeast of the first mill and along the same plane, parallel to the river. The new edifice measured about 150 by 43 feet. A few years later, in 1821, the company built still another mill that probably stood, before its demolition, w between the older structures and the Charles. In the 1830's the BMC improved its water power system, and in the 1840's it added still more mill buildings. One that reached completion



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1700-1799	ART	ENGINEERING	MUSIC	THEATER
<b>X X</b> 800-1899	COMMERCE	EXPLORATION/SETTLEMENT	PHILOSOPHY	TRANSPORTATION
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SPECIFIC DAT	ES 1814-50	BUILDER/ARCI	HITECT Paul Moody	<i>y</i>

STATEMENT OF SIGNIFICANCE

According to business historians Glenn Porter and Harold C. Livesay, the Boston Manufacturing Company "was the first truly modern factory in the United States." Founded in 1813 by Francis Cabot Lowell, Patrick T. Jackson, and others, the BMC "integrated and mechanized production from raw material to finished product under a single management and within a single factory."<sup>1</sup> This "new industrial form," says textile manufacturing historian Caroline F. Ware, "soon came to dominate the cotton industry," because it "marked a radical departure from all that had gone before, differing almost as much from the early mill as the latter had from its handicraft predecessors."<sup>2</sup>

Much of the BMC's success stemmed from its innovative development of an entire series of new or improved textile machines. According to Harvard business historian George Sweet Gibb, "the power loom of the Boston Manufacturing Company affected the American cotton textile industry as no other innovation since 1790 had done. It signalized the awakening of American mechanics" and the end of their "slavish dependence" on British technology.<sup>3</sup> Moreover, says Ware, it was power-loom weaving that "furnished the technical basis for reorganization of the factory" and for "a practically unlimited extension in the size of the factory plant."<sup>4</sup>

(continued)

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<sup>2</sup>Caroline F. Ware, <u>The Early New England Cotton Manufacture:</u> <u>A Study in Industrial Beginnings</u> (Boston, 1931), 60.

<sup>3</sup>George Sweet Gibb, <u>The Saco-Lowell Shops: Textile</u> <u>Machinery Building in New England, 1813-1949</u> (Cambridge, 1950), 33.

<sup>4</sup>Ware, <u>The Early New England Cotton Manufacture</u>, 63, 64.

(See continuation sheet.)

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CONTINUATION SHEET Boston Mfg. ITEM NUMBER 7 PAGE one

in 1843 connected the first two mills and mirrored their design. The company put up more factory structures in the 1870's and 1880's and at some point, probably about 1885, removed the common monitored roof of the 1814, 1816, and 1843 mills and replaced it with a low-pitched gable roof that converted them from a 3 1/2-story to a 4-story manufacturing edifice.

Aside from alteration of its roof, this three-section building, which includes the earliest two BMC mills, has changed remarkably little since its construction. Until the 1970's it continued to house textile manufacturing operations, the most recent being that of the Puritan Dress Company, and so the interior remains relatively clear of modern partitioning and continues to display, in most areas, original ceiling beams and round wood and cast-iron support columns. Outside, stories one through three exhibit their original brick walls laid in common bond. The 1814 and 1816 sections have a header course every sixth row, while the 1843 section has one every seventh row. Throughout the lower three floors and the partially raised basement, six-over-six sash windows are set in green-painted wood surrounds and rectangular openings with flat brick arches and limestone sills. Fourth-story windows exhibit 12-over-12 sashes set in segmentally arched openings. Other than the attachment of a later mill at an angle to the southeast end of the three-section building, the chief exterior changes consist of the bricking or blocking up of a handful of windows, the addition of cast-iron fire escapes to the northwest and south walls, and the erection about 1885 of a five-story stair tower on the north wall near the junction of the 1814 and 1843 mills. Now vacant, the historic BMC complex is in sound condition and situated in a combination commercial and industrial area.

Boundary Justification. The boundary of the nominated property includes about 2 1/2 acres and the three oldest extant BMC mills, which share a common roof and serve as a single large factory. Not included are several nearby BMC structures dating from the 1850's and after. They do not contribute to the national significance of the site, nor do they possess particular architectural or engineering significance. (continued)

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CONTINUATION SHEET Boston Mfg. ITEM NUMBER 7 PAGE two

Boundary Description. As indicated in red on the accompanying maps [(1) U.S.G.S. 7.5 Series, Mass., Newton Quad., 1970; and (2) AASLH Sketch Map, 1977], a line beginning at the intersection of Moody Street and the entrance drive to the mill complex at 144 Moody Street and extending southward approximately 100 feet along the east right-of-way of Moody Street to the north bank of the Charles River; thence, eastward approximately 600 feet along the north bank of the Charles to an unmarked point immediately past the old covered tailrace of the BMC; thence, northward approximately 175 feet to the southeast corner of the 1816 mill (the easternmost of the three mills making up the nominated complex); thence, northeastward along the outer plane of the southeast wall of said building approximately 65 feet to an unmarked point; thence, northwestward approximately 700 feet to the point of beginning.

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CONTINUATION SHEET Boston

ITEM NUMBER 8 PA

PAGE one

Three pre-1850 BMC buildings survive, and these, along with a narrow strip of land between them and the Charles River, constitute the nominated property. Erected in 1814, 1816, and 1843, the three four-story, red brick structures rest end-to-end, share a common roof, and display (except for the roof, which was added about 1885) only minimal exterior and interior alterations.

#### History

In her prize-winning 1931 study of the early New England cotton textile industry, Caroline F. Ware asserts that "the story of the New England cotton industry is the story of the industrialization of America. This industry brought the factory system to the United States and furnished the laboratory wherein we worked out industrial methods characteristic of the nation."<sup>5</sup> Ware and most other economic historians date the beginning of the American cotton textile industry to 1790, the year in which William Almy and Moses Brown, utilizing the ideas and skills of English immigrant Samuel Slater, opened the country's first successful cotton mill in Providence, R.I. Following the Providence example, a number of entrepreneurs started cotton mills during the next two decades, and by 1810 some 168 cotton factories with 90,000 spindles were operating in the United States. These mills struggled, however, against competition from cheap goods imported from England and against shortages of skilled workers and investment capital. The trade embargo of 1807-9 and the War of 1812 altered these conditions significantly by shutting off foreign competition, freeing commercial capital for investment in manufacturing, and sparking a wave of new mill construction. Chief among these new enterprises stood the Boston Manufacturing Company, which was organized, says Ware, along a "new industrial form" that "soon came to dominate the cotton industry" and that "marked a radical departure from all that had gone before, differing almost as much from the early mill as the latter had from its handicraft predecessors."<sup>6</sup>

- <sup>5</sup>Ibid., 3.
- <sup>6</sup>Ibid., 60.

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Francis Cabot Lowell, a judge's son born in Newburyport, Mass., in 1775, proved the principal architect of the innovative new company. Having grown up in Boston and excelled in mathematics at Harvard, Lowell engaged in a profitable import-export business until 1810 when he and his family took a prolonged trip to the British Isles. Historians are not in agreement about whether Lowell went abroad chiefly for his health or primarily to study English manufacturing methods, but most recent studies suggest the latter as the reason for the trip. Whatever the case, Lowell seized every opportunity to examine British technology, especially in Manchester textile mills. In addition, while in Edinburgh in 1811 he carried on a lengthy dialogue with fellow Bostonian traveler Nathan Appleton about the organization and technical knowledge necessary to establish a successful cotton mill in the United States. British law forbade the exportation of textile machinery, designs, or artisans, but Lowell's biographer, Robert Sobel, speculates that he brought "the intricate designs of cotton machinery in his head without the aid of drawings" back to America.

When Lowell arrived home in 1812 he found his international commercial enterprises in financial trouble as a result of the war with England. He remained undeterred, however, and set about immediately organizing his new cotton manufacturing venture. Apparently his first partners included only his brother-in-law, Patrick T. Jackson; a cousin, Benjamin Gorham; and a former associate, Uriah Cotting. On February 23, 1813, they obtained a State charter for the Boston Manufacturing Company to be situated in Waltham, and during the summer they secured additional financial support from Appleton, Warren Dutton, Israel Thorndike and others. Lowell and his fellow investors, 12 men in all, met in Boston on September 4, 1813, and signed articles of association for the new firm. According to Sobel, while there is no record of what Lowell told his colleagues, his manner of proceeding suggests that he had a master plan. In contrast to the British cotton manufacturing system, in which yarn was made in one place and cloth woven in another, Lowell planned to bring the spinning and weaving processes together under one roof, mechanize the entire operation, and power it with flowing water.

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CONTINUATION SHEET Boston Mfg. ITEM NUMBER 8 PAGE three

To accomplish all this, the BMC first had to have a mill and machinery. Jackson had found a suitable mill site in the spring, and now in September he completed the purchase of it. The BMC would be situated on the north bank of the Charles River in Waltham, where for almost 25 years John Boies, the previous owner of the property, had operated a paper mill. In October the 12 associates met again to complete the organization of their firm, and they made Jackson treasurer and chief executive officer. Lowell, Appleton, Thorndike, and James Lloyd were named directors. This same month Lowell secured the services of Paul Moody, a highly regarded skilled mechanic, as superintendent of construction of the new mill and machinery. From this moment, says expert textile machinery historian George Sweet Gibb, "the success or failure of the Boston Manufacturing Company was to rest less with the promoters, administrators, and mechanical theorists than in the skillful hands of Paul Moody, the practical mechanic." He "immediately proved to be as powerful and significant a figure . . . as Francis Lowell himself."<sup>8</sup>

Moody, with assistance from Jackson, commenced at once erecting the mill and setting up a machine shop. Work crews needed almost a year to construct it, but by November, 1814, BMC had a solid red brick mill that measured about 90 by 45 feet and rose three and one-half stories to a double-pitched or monitored roof. The basement contained space for a waterwheel and the machine shop, while the first floor was reserved for carding, the second for spinning, and the third and fourth for weaving. Jacob Perkins, who had rejected the superintendent's job before Moody took it, helped install a waterwheel, dams, flumes, and a raceway. Meanwhile Lowell developed plans and drawings for a power loom, and Moody constructed a model. By the end of 1814 the two men had completed a workable loom chiefly of their own design and had purchased several other machines so that now the BMC stood ready to begin producing cotton cloth. Significantly the firm's work force consisted in large part of area farm girls-predecessors of the famous "Lowell girls"--for whom the BMC had built company boarding houses.

(continued) \*

<sup>8</sup>Gibb, The Saco-Lowell Shops, 11, 12.

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CONTINUATION SHEET Boston Mfg. ITEM NUMBER 8 PAGE four

When the Boston Manufacturing Company turned out its first cloth early in 1815, according to business historians Glenn Porter and Harold C. Livesay it "was the first truly modern factory in the United States, for it integrated and mechanized production from raw material to finished product under a single management and within a single factory."<sup>9</sup> Lowell had become, says textile industry historian Perry Walton, the first person systematically to arrange the processes of manufacturing in a mill so that no labor would be lost in passing from one process to another."<sup>10</sup> This integration "established," says Gibb, "a pattern that had a profound effect upon the industrial organization of the country."<sup>11</sup> Entrepreneurs everywhere copied the "Waltham model," and the Waltham promoters themselves built the Nation's first planned industrial city, Lowell, Mass., on this new principal.

The Boston Manufacturing Company had a far-reaching impact on the future development of textile machinery as well as on mill planning and organization. In Gibb's opinion the firm's "power loom . . . affected the American cotton textile industry as no other innovation since 1790 had done. It signalized the awakening of American mechanics" and the end of their "slavish dependence" on British technology. Moody and his assistants studied, mastered, and improved, says Gibb, "not just the power loom but most of the machines then known to cotton textile manufacturers."<sup>12</sup> The Waltham power loom necessitated changes in the spinning process, so Moody invented the warper. Later Lowell and Moody joined to develop the double speeder, and still later Moody came up with the filling throstle for the so-called "dead spindle" system of spinning. "From 1814 to 1824," says Gibb, "Moody's inventions and adaptations of English inventions," which he made in the BMC machine shop, "were the dominant development in the American textile industry."<sup>13</sup> Moreover, his work laid a foundation (continued)

<sup>9</sup>Porter and Livesay, <u>Merchants and Manufacturers</u>, 23. 10Perry Walton, <u>The Story of Textiles: A Bird's-Eye View of</u> <u>the History of the Beginning and the Growth of the Industry by</u> <u>Which Mankind is Clothed</u>, 2d edition (Boston, 1925), 198. <u>11Gibb</u>, <u>The Saco-Lowell Shops</u>, 24.

- 12<u>Ibid.</u>, 24, 33.
- 13<sub>Ibid.</sub>, 38.

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CONTINUATION SHEET Boston Mfg. ITEM NUMBER 8 PAGE five

for evolution of the long-famous Saco-Lowell Shops, which historically have been one of the Nation's two major manufacturers of textile machinery.

During its first decade, the BMC grew rapidly and carried the town of Waltham, rural until then, along with it. Able to turn out cloth in quantity and compete successfully with British firms; the BMC reaped sizeable profits and poured some of them back into the community by building several schools and churches and founding a library and the town's first fire department. In the middle of all this success, Lowell died, in 1817, and Jackson, Appleton, and several other Waltham associates formed the Merrimack Manufacturing Company to develop a completely new planned industrial community, to which they gave their deceased partner's name. "With the establishment of Lowell," says Kenneth Mailloux, historian of the BMC. "the Boston Manufacturing Company ceased to be New England's most progressive textile factory."14 Still, during the next few decades, while distinguished visitors frequented the factory primarily because of its historical significance, the BMC continued to grow at a modest rate. Occasionally, as in 1833 when it dug a new canal and in 1843-47 when it erected some new buildings, the firm upgraded and expanded its physical facilities. "By 1850," however, "the significance of the Boston Manufacturing Company lay all in the past," says Mailloux.<sup>15</sup> The firm continued to do business until 1929, but then the stockholders voted to cease operating and sell the buildings peacemeal to several small companies.

<sup>&</sup>lt;sup>14</sup>Kenneth F. Mailloux, "The Boston Manufacturing Company: The End of an Era," <u>Textile History Review</u>, V (October 1964), 158.

<sup>&</sup>lt;sup>15</sup><u>Ibid.</u>, 164.

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CONTINUATION SHEET Boston Mfg. ITEM NUMBER 9 PAGE one

- "The Boston Mfg. Co, 1901, Cotton Mill, Waltham, Mass.," Insurance Map, Assoc. Mutual Insurance Co., Serial #15022, Index #12777.
- Copeland, Melvin Thomas, <u>The Cotton Manufacturing Industry of</u> <u>the United States</u> (Cambridge: Harvard University Press, <u>1917</u>).
- Faulkner, Harold U., "Francis Cabot Lowell," <u>Dictionary of</u> <u>American Biography</u>, Vol. VI, Part 1 (New York: Charles Scribner's Sons, 1933), 456-57.
- Gibb, George Sweet, <u>The Saco-Lowell Shops: Textile Machinery</u> Building in New England, 1813-1949 (Cambridge: Harvard University Press, 1950).
- Gregory, Frances W., <u>Nathan Appleton: Merchant and Entrepreneur</u>, <u>1779-1861</u> (Charlottesville: University of Virginia Press, 1975).
- Hayes, John L., <u>American Textile Machinery: Its Early History</u>, <u>Characteristics, Contributions to the Industry of the</u> <u>World, Relations to Other Industries, and Claims for</u> <u>National Recognition</u> (Cambridge: University Press, John Wilson and Son, 1879).
- Mailloux, Kenneth F., "The Boston Manufacturing Company," Textile History Review, V (July 1964), 3-11.

, "Boston Manufacturing Company: Its Origins," Textile History Review, IV (October 1963), 157-63.

, "The Boston Manufacturing Company: The End of an Era," <u>Textile History Review</u>, V (October 1964), 158-65.

, "The Boston Manufacturing Company: The Factory and the Town," Textile History Review, V (July 1964), 114-22.

, "Labor Problems and Conditions at the Boston Manufacturing Company, 1813-1848," Cotton History Review, II (July 1961), 139-46.

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## NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

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CONTINUATION SHEET Boston Mfg. ITEM NUMBER 9 PAGE two

- Porter, Glenn, and Harold C. Livesay, <u>Merchants and Manufact-</u> <u>urers: Studies in the Changing Structure of Nineteenth-</u> <u>Century Marketing</u> (Baltimore: The Johns Hopkins Press, 1971).
- Sanderson, Edmund L., <u>Waltham Industries: A Collection of</u> <u>Sketches of Early Firms and Founders</u> (Waltham: Waltham Historical Society, Inc., 1957).
- Sobel, Robert, <u>The Entrepreneurs: Explorations Within the</u> <u>American Business Tradition</u> (New York: Weybright and Talley, 1974).
- Waltham Illustrated (Waltham: Bradford and Williams, 1886).
- Walton, Perry, <u>The Story of Textiles: A Bird's-Eye View of</u> the History of the Beginning and the Growth of the Industry by Which Mankind Is Clothed, 2d edition (Boston: Walton Advertising and Printing Company, 1925).
- Ware, Caroline F., <u>The Early New England Cotton Manufacture:</u> <u>A Study in Industrial Beginnings</u> (Boston: Houghton Mifflin Company, 1931).





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> Prepared by: George R. Adams AASLH, 1977 (Not to scale)

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