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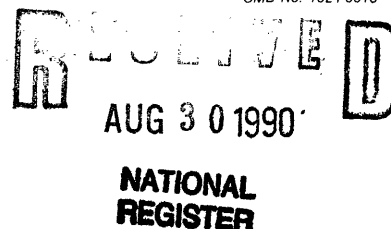National Park Service

National Register of Historic Places
Multiple Property Documentation Form

AUG 3 0 1990·

**NATIONAL
REGISTER**

This form is for use in documenting multiple property groups relating to one or several historic contexts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. For additional space use continuation sheets (Form 10-900-a). Type all entries.

A. Name of Multiple Property Listing

Textile Mills in South Carolina Designed by W.B. Smith Whaley, 1893-1903

B. Associated Historic Contexts

Textile Mills in South Carolina Designed by W.B. Smith Whaley, 1893-1903

C. Geographical Data

The State of South Carolina

☐ See continuation sheet

D. Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this documentation form meets the National Register documentation standards and sets forth requirements for the listing of related properties consistent with the National Register criteria. This submission meets the procedural and professional requirements set forth in 36 CFR Part 60 and the Secretary of the Interior's Standards for Planning and Evaluation.

Mary W. Edmonds   8/20/90
Signature of certifying official   Date
 Mary W. Edmonds, Deputy SHPO, S.C. Department of Archives & History, Columbia, SC
State or Federal agency and bureau

I, hereby, certify that this multiple property documentation form has been approved by the National Register as a basis for evaluating related properties for listing in the National Register.

Jerry Rogerman   10/10/90
Signature of the Keeper of the National Register   Date

One of the most significant developments in the growth of the "New South" between the end of the Civil War and the beginning of the twentieth century was the dramatic rise of the textile industry. South Carolina had been an early leader in the antebellum era, but it was the industry's resurgence from 1880 to 1910 which gave the state a prominent – at times preeminent – place in the South. In South Carolina that resurgence was particularly significant throughout the 1890s and into the first few years of the twentieth century. "The typical 1880 mill had fewer than six thousand spindles," observes David L. Carlton in <u>Mill and Town in South Carolina 1880-1920</u>. "By 1910 it had more than twenty-five thousand. The enlarged scale of operations reflected a fundamental shift away from small factories producing primarily yarn for local sale, to integrated cloth mills competing in national and international markets."(1)

This dramatic growth was in large part due to the work of W.B. Smith Whaley and Company, of Columbia, an engineering and architectural firm specializing in cotton mill design. Both the technological and architectural sophistication of the firm's designs from 1893 to 1903 confirm its position as one of the greatest textile mill designers in South Carolina and as a firm of regional and national stature.(2) Its philosophy of design was that

> the proper designing of a cotton mill requires a knowledge
> of Mechanical, Civil and Electrical Engineering and a
> certain amount of architectural skill, in order that all
> the problems involved may be skillfully handled, and that
> the building shall be well proportioned and pleasing to
> the eye. The members of this firm . . . have studied
> carefully the problems that have arisen in the building
> and operation of every plant that they have designed,
> with a view to perfecting subsequent work, and they take
> pride in the fact that every cotton mill they have designed
> has been an improvement on the one previous to it.(3)

Many intact historic resources designed by W.B. Smith Whaley and Company, including main mills and their additions, power plants, offices, and other auxiliary buildings, survive to illustrate the evolution of the firm's engineering and architectural designs.

<u>Additional Information</u>

William Burroughs Smith Whaley (1866-1929) was one of the most prominent figures of the South Carolina textile industry at the beginning of the twentieth century, both for his mill designs and his ownership/management of several mills. Whaley, a native of Charleston, attended the Stevens Institute of Technology and was a graduate of Cornell University (1888) in mechanical engineering. While at Cornell his talent was recognized by the Department of Engineering, which voted him its best design engineer. After a brief stint as an electrical engineer, Whaley resumed work as a mechanical engineer and joined the firm of Thompson and Nagle, in Providence, Rhode Island. His first experience as a textile mill engineer was under D.M. Thompson, the major partner of the firm, general manager of a textile corporation, and engineer for several Northern mills. Thompson later recalled that he had "turned out from his office sixty-odd young

<div align="right">[X] See continuation sheet</div>

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mill engineers, and that Whaley was the brightest of the lot."(4)

In 1892 Whaley visited South Carolina to investigate potential sites for textile mills run by hydroelectricity. He was impressed with Columbia, "recognizing the fact that this city was not only a convenient point for reaching the cotton mill region of the south, but that it was destined to become a great mill city and therefore offered opportunities."(5) Whaley settled in Columbia later that year and began practice as a mechanical engineer specializing in textile mill design. One of the keys to his phenomenal success was not only his talent as an engineer, but as a proponent of industrial expansion and innovation, and a enthusiastic spokesman for South Carolina's potential in textiles.

Whaley's first design was for the Union Cotton Mill (1893-94), in Union County, for local textile entrepreneur Thomas C. Duncan. The mill was completed, with 10,000 spindles (by 1903, 14,500), in early 1894.(6) Over the next ten years Whaley would design, and in some instances serve as president of, twenty cotton mills or major additions. South Carolina led with fifteen mills, four of which Whaley owned and operated in Columbia. Alabama followed with two; Georgia, North Carolina, and Massachusetts each had one. Most of the designs were by the partnership of Whaley and Gadsden E. Shand, as W.B. Smith Whaley and Company, which was formed in January 1894. Shand was a graduate of the University of South Carolina (1888) in civil engineering and Columbia College, now Columbia University, in architecture. He had also worked as the superintendent of construction for the South Carolina State House and in private practice before joining Whaley.(7)

W.B. Smith Whaley and Company designed eight mills or additions in the 1890s, and each new design demonstrated the evolution of its engineering and architectural skills. The firm succeeded so well that by 1899 it had opened a second office - in Boston, near the New England textile manufacturers. Its second mill design was for the Courtenay Manufacturing Company (1894), at Newry, in Oconee County. Courtenay Mill, like Union, was a relatively small mill of 10,000 (by 1903, 18,000) spindles. It was listed in the National Register in 1982 as part of the Newry Historic District. Other mills which followed included the Richland Cotton Mill (1894-95) and Granby Cotton Mill (1896-97), at Columbia, in Richland County. Richland Mill, also containing 10,000 (by 1903, 26,000) spindles, was the first of Whaley's great mills which he served as president and which contributed so dramatically to the growth of Columbia as a regional textile center. It was individually listed in the National Register in 1983. Granby Mill, with 18,000 spindles (by 1903, 57,000), was considerably larger than Whaley's previous designs and was the second

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Whaley-designed and -owned mill in Columbia. The Avondale Cotton Mill
(1897), near Birmingham, Alabama, nearly doubled the size of Granby Mill,
with 35,000 spindles. The Enterprise Cotton Mill (1896), at Orangeburg,
in Orangeburg County, was another small mill of 10,000 (by 1903, 13,800)
spindles. It was individually listed in the National Register as part of
the City of Orangeburg Multiple Resource Area in 1985. The Warren
Manufacturing Company, at Warrenville, in Aiken County (1897-98), had
33,000 spindles, and was the largest Whaley mill in the state when
built.(8)

As the end of the decade approached, Whaley's work was gaining widespread
attention, not only in South Carolina, but regionally and even nationally.
A December 1897 editorial in The State, perhaps South Carolina's most
influential newspaper, reminded readers that his firm had designed eight
mills in five years. "It is safe to say that a majority of them would not
have been built at all if it had not been for his efforts," the editorial
observed. "That is what one young man has done for industrial development
in the south within five years."(9)

Whaley's designs to that date, however, were dwarfed by his next projects.
The first, which helped to establish W.B. Smith Whaley and Company's place
as the most prominent textile mill firm in South Carolina, was a design
for Thomas C. Duncan. Union Cotton Mill # 2 (1896-98), with 75,000
spindles, was built adjacent to the original 1893-94 mill, and increased
the total there to nearly 90,000 spindles.(10)

The Olympia Cotton Mill (1899-1900), in Columbia, was built immediately
adjacent to Granby Mill, and was the peak of Whaley's career as a textile
mill designer and as an entrepreneur. He, with the other directors of the
Richland and Granby Mills, "decided to build a larger mill than either of
the others . . . to make it as nearly perfect in every respect as possible.
It was decided that the buildings should be in keeping with the scope of
the enterprise, and that, so far as possible, they should be handsome and
substantial."(11) When the new project was announced, The State
trumpeted it as "the latest and greatest" of Whaley's mills, "the greatest
single mill in the South." An editorial claimed that when Olympia was
finished, Columbia would be "far beyond all competition, the greatest
cotton manufacturing city in the south, with over 50,000 more spindles
than Augusta." Plans called for 2,400 looms, and 104,000 spindles, in a
four-story mill with some eight acres of floor space. When built it would
be the largest textile mill under a single roof in the United States -
indeed, in the world.(12)

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Perhaps the most significant feature of the Olympia Mill, other than its
sheer size, was its innovative power plant. From the beginning of his
career as a textile engineer, one of Whaley's main priorities was
producing efficient yet economical power. Early engines, most often
steam engines, were directly connected to the loom and spindle shafts by
pulleys, with belts or ropes. Mill designs required extremely heavy walls
and flooring to account for the weight of the large engines and long
shafts. In addition, the machinery's dependence on a single engine, on
long shafts, and on belts and ropes resulted in frequent shut-downs of the
entire mill. W.B. Smith Whaley and Company's Modern Cotton Mill
Engineering discussed a solution to these problems in 1903:

> In the modern mill these objections are entirely done away
> with, and electricity is used as the means of transmitting
> the power generated by the engine to the points of application.
> An electric generator is directly connected to the shafting
> of an engine, or a turbine, if water is used, and the electric
> current produced by the generator is carried through wires to
> motors suspended from the ceilings of the several floors, and
> located as closely as practicable to the points at which the
> power is to be utilized. Instead of the entire power being
> applied at one point there will be several motors in the mill,
> each one of which has its own individual group of machinery
> to take care of, and any one of these motors may be operated
> independently of the others.(13)

It was in his four Columbia mills, perhaps because he had a more vested
interest in them, that Whaley experimented most with the latest
developments in engineering and technology. Richland Mill, built in
1894-95, was originally run by the typical system - a single steam engine
connected to shafting by a rope drive. Granby Mill, built 1896-97,
represented a dramatic improvement in Whaley's mill designs. It had no
engine room, but was powered by electricity generated one-and-a-half miles
away at the Columbia Canal. The power was distributed through the mill by
a series of transformers for general power and lighting, and eight
motors. Each different type of machinery, such as the pickers, carders,
rovers, spinners, looms, slashers, finishers, and the machine shop, had a
separate motor. These motors were much more efficient and economical than
those in earlier mills. They were not free of problems, however, as
rising water at the canal often caused power failures throughout the
mill.(14)

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In planning the Olympia Mill Whaley not only wished to retain Granby's
advantages of electric-power distribution, but also to solve the problem
of inadequate or unreliable power from the Columbia Canal. His solution
was to "design a mill for the electric drive, suspending the motors from
the ceilings, and obtaining the current for running these motors from
electric generators direct connected to the shaft of steam engines."(15)
This method of powering Olympia was described as "an entirely new
departure in mill building and working" by a correspondent of the New
York Journal of Commerce in November 1900. "This is spoken of by most
southern manufacturers as an 'experiment,'" he noted, "but Mr. Whaley
declines to regard it as such; it is, according to him, the application of
varied experiences and results carefully worked out therefrom."(16)
This "experiment" was so successful that Olympia's three large General
Electric generators not only powered the new mill, but also the Richland
and Granby mills, and later, the Capital City Mill. When first tested the
Olympia Mill's generators worked so smoothly that the Granby Mill was
switched to them while it was fully operating, without any interruption or
hesitation in the looms, spindles, and other machinery. Whaley, further
utilizing the Olympia's power supply, also revitalized the Columbia
Electric Street Railway, Light and Power Company, providing the city's
electric power, lights and street railway.(17)

The Olympia Cotton Mill was as architecturally significant and innovative
as it was technologically. One of the most notable features of the mill
was its twin front towers – the left one a clock tower and the right one a
bell tower – made of red brick and mortar, with buff terra cotta detailing
which included string courses, elaborate pilaster capitals, and cornices.
Interior decorative elements included Venetian mosaic wainscoting and
floors. Each tower housed an elevator and two toilet rooms for the
operatives. The toilet rooms were equipped with porcelain sinks and
toilets, with marble fittings and nickel fixtures. Decorative elements
were not confined, however, to the towers. The power plant, particularly
the engine room, featured marble wainscoting and Terrazzo mosaic floors.

Such attention to detail drew considerable criticism from the textile
industry, particularly from Northern manufacturers, who saw it as
extravagance or at best ill-advised. The general manager of the National
Association of Manufacturers, for example, damned Olympia with faint
praise, calling it "novel even from the Northern point of view" and
claiming that the mosaic floors, for example, were "not usually regarded
as essentials in mill construction, particularly in the South."(18)

The editors of The State, who were unabashed supporters of Whaley and
his revitalization of South Carolina's textile industry, defended him

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against such criticism. They claimed that although Olympia was "the greatest advance yet made in the quality of cotton mill construction" it was not extravagant, because the materials were "more durable and in the end more economic."(19) One of the mill's directors, most likely Whaley himself, commented further in a letter to the editor in February 1901:

> Much of what we have accomplished here is due to the
> fact that we have borrowed largely from the experience
> of the New England manufacturers, and we are not only
> utilizing all that we find of merit in their work,
> but are even improving on that work by the experience
> we have enjoyed during the last quarter century. It
> seems now to be an accepted fact that the Olympia, taking
> it all in all, is the finest mill in the world.(20)

Although most Southern mills of that era produced rough, unfinished cloth, Whaley's ambition was to prove that they could not only produce "fine print cloths" comparable to those made in Northern mills, but more economically. Olympia Mill was designed with this in mind. Its major product was "a class of goods that a few years ago was not made in the South, and is to-day the chief product of the Fall River [Massachusetts] mills."(21)

Just as he intended the Olympia Mill complex to be an industry model of efficient and economical production combined with the best possible working conditions, Whaley also intended the surrounding community to be an example of the best possible living conditions. He designed the entire village, selecting the site, laying out the plan, and building some three hundred "neat, comfortable and substantial houses, much better than the average mill village affords."(22) House types and paint colors were even alternated in an attempt to combat the sameness of so many mill villages. Other innovations included street lights and a fire department for the Olympia, Granby, and Richland mills and villages. "The Olympia's mill town represents an advance in quality and equipment over any mill town in the south," claimed The State, "with a perfect system of sewerage, well-built cottages of varied architecture, electric lights in every room, waterworks . . . [and other] features as yet unknown to any mill community in the country, including a theatre, a hospital, a big department store, a park, etc."(23)

Though he was quite successful when conceptualizing, designing, and even financing ambitious mill complexes, Whaley's record in mill ownership and management was not nearly so successful. From the outset, expenses in machinery and materials in the four Columbia mills exceeded projected

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costs. Whaley's mills were often hard-pressed to make profits, even at the peak of production and with the highest prices. Machinery, bought on credit, was used as collateral for loans; those loans bought stock in the mills; the stock was used as collateral for more loans; and those loans went to satisfy the original Northern creditors from which the machinery had been purchased. Such a fragile base, dependent on many factors, was ill-suited to the fluctuating textile industry and was directly responsible for Whaley's subsequent bankruptcy.(24)

Whaley's Columbia mills might have been on the leading edge of textile technology, but they were certainly not models of prosperous, or even well-managed, business entities. Whaley, ever the engineer, was much more concerned with the mills themselves than he was with managing them. His daughter recalls that when he inspected one of his mills, "he knew every inch of it - any part of it that wasn't right, he knew," but that "he didn't have much of a head for business."(25)

Though the Olympia Mill and village reflected a more enlightened concern for operatives than was common at the beginning of the twentieth century, Whaley's uncompromising stand on labor unions demonstrated deeper problems. The National Union of Textile Workers succeeded in organizing some South Carolina workers, and established a large union local in Columbia, but met with fierce opposition from Whaley. At first he attempted to nullify the impulse to organize by providing additional social services in the villages, but the union steadily increased its efforts.

By the fall of 1901 the inevitable clash occurred, over a Labor Day holiday and parade supported by the union. The operatives intended to take the day without pay, but Whaley insisted that they make up the time by working overtime on the Saturday before, and threatened to suspend for a week anyone who refused to work the overtime. When "several hundred" operatives - both union members and non-members - refused to work on the specified Saturday, they found themselves "locked out" of the mills on the following Monday. Whaley not only kept the protesters out, but refused to admit anyone who was either a member of or sympathetic to the union.(26) The State, in a rare break with Whaley, editorialized that "there seems to be both right and wrong on each side. . . . It was unwise and inexpedient for several hundred of the operatives to quit work . . . per contra, it was unwise and inexpedient for the management to refuse to re-employ them."(27) Whaley commented to a reporter on "unionism":

> But this matter of unionism, that is another thing. We
> are the owners of our mills and we propose to run them.
> We do all we can for our help, and propose to do much

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more. We do not propose, however, to have any of this
unionism business.(28)

The "lockout" led to a "callout" by the union, declaring a strike by the
workers at Olympia, Granby, and Richland Mills. Though Whaley claimed
that most of the operatives were still at work and that the mills were
running "to at least three-fourths of their capacity," informal surveys by
The State found that as many as three-fourths of the operatives were out
of work.(29) Many operatives, unwilling to leave the union, left Columbia
to seek work in other mill towns. Others stayed, but only returned to
work in Whaley's mills after leaving the union. An uneasy agreement was
finally reached, in which the operatives were accepted back at their jobs
"without question as to their membership in or sympathy with the Textile
union," though it was tacitly understood that any affiliation with the
union would endanger their jobs.(30) One labor historian has noted that
"by the end of September the strike was broken, and so was the local, once
the largest textile local in the world."(31)

Although W.B. Smith Whaley and Company designed eight other mills or major
additions in South Carolina after the Olympia Mill, only two of them -
Buffalo Cotton Mill (1901-02), at Buffalo, in Union County, and Lancaster
Cotton Mill # 2 (1903), at Lancaster, in Lancaster County - were large-
scale projects in comparison with the firm's previous designs. Buffalo
Mill, a third design for Thomas C. Duncan, was built with 33,000 spindles
and featured yet another technological innovation in its power plant. It
was similar to the plant at Granby, with steam engines distributing the
electricity. Due to the topography at Buffalo, however, it was located in
front of the mill, in a separate building at some distance from the main
mill. This arrangement allowed for flexible designs, in which the main
mill and power plant were sited independent of each other, to provide the
most efficient site possible for each component. With its twin towers,
the Buffalo Mill was architecturally quite similar to the Olympia Mill,
and was even mistaken for the earlier mill in the 1907 Handbook of South
Carolina. The Buffalo Mill Historic District, including the mill
complex and village, is the first component nominated in this multiple
property submission. The next of the firm's projects, the Capital City
Mill (1902-03), was the last of the Whaley-owned and -operated mills in
Columbia, and was quite small, with only 6,000 spindles. The last great
Whaley design in South Carolina was Lancaster Cotton Mill #2, built for
Leroy Springs, a textile entrepreneur of regional and national stature.
This major addition, with some 50,000 spindles, boasted twin towers
similar to those at Olympia and Buffalo and was dubbed "the Million Dollar
Mill." In 1903, the last year W.B. Smith Whaley and Company designed
textile mills in South Carolina, relatively small mills were the rule.

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Among them were the Seneca Cotton Mill, at Seneca, in Oconee County, with
17,000 spindles; the Dekalb Cotton Mill, at Camden, in Kershaw County,
with 16,000 spindles; the Glenn Lowry Manufacturing Company, at Whitmire,
in Newberry County, with 30,000 spindles; the Inman Mill, at Inman, in
Spartanburg County, with 18,000 spindles; and the Ware Shoals
Manufacturing Company, at Ware Shoals, in Greenwood County. The Dekalb
Mill was listed in the National Register in 1982 as part of the Kendall
Mill Historic District.(32)

The financial condition of Whaley's four Columbia mills, long burdened
with overwhelming and ever-increasing debt, became even more critical
throughout 1903. When a complete reorganization of the Richland, Granby,
Olympia, and Capital City Mills was approved by the board of directors in
November of that year, Whaley resigned as president. There was no
dispute, however, between Whaley and the board. His resignation
accomplished two valuable objectives - providing new leadership for the
struggling mills, and providing him with the opportunity to devote more
energy and capital to chiefly technological interests. The State
characterized his resignation as "voluntary . . . prompted by the highest
and most unselfish motives. . . . While Mr. Whaley resigns the presidency
it is a cause of gratification that he retains his place upon the
directorate. That his unbounded faith in Columbia's future is not
diminished we may well believe."(33)

Whaley left Columbia in December 1903, moving to Boston and making his
engineering headquarters at the W.B. Smith Whaley and Company office
there. Though his resignation from the Columbia mills and their related
financial difficulties were undoubtedly the catalyst, there was another
opportune reason for the move. One of the most prominent manufacturers
of looms in the United States - the Draper Company - had convinced Whaley
to design mills in New England instead of in the South. Eben S. Draper,
the company's sales representative and later governor of Massachusetts,
sent his private railroad car to Columbia for Whaley and his family.(34)
The Butler Mill (1903), in New Bedford, Massachusetts, was one of the
first mills Whaley designed in New England, and had 100,000 (later
150,000) spindles.(35)

The Columbia office of the Whaley company was taken over by its junior
partner, Gadsden E. Shand. It subsequently became Shand and Lafaye, with
George E. Lafaye as its junior partner; he had been the Columbia office's
chief draftsman. Commenting on Whaley's departure, an editorial expressed
the hope that he would "still retain some interest in Columbia, whose
splendid progress and prosperity of the past decade are due so largely to
his constructive genius."(36) When he declared bankruptcy in 1904 The

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<u>State</u> observed, "for a brief period Smith Whaley may be financially embarrassed but . . . his forte lies not in the management of details or in the intricacies of financiering but in the conception and execution of great designs for industrial development on grand scales."(37)

Whaley's career after he left South Carolina was primarily concerned with innovations and improvements in steam, gasoline, and oil engines. His major achievement before his death in 1929 was the development of the American Whaley Engine. This engine, said to be an improvement over the diesel engine, was patented in the United States and several foreign countries.(38)

It is difficult to overstate the impact W.B. Smith Whaley had on South Carolina's textile industry. In only ten years - 1893 to 1903 - his firm established, and constantly revised, the standards for textile mill design, making good on its promise to make every mill "an improvement to the one previous to it."(39) A significant factor in its success was that the rapid development of the firm coincided with the rapid development of the industry. Whaley also utilized his talents as an engineer and as an entrepreneur to the best advantage of both the firm and the industry. There were 50 textile mills in South Carolina when Whaley moved to Columbia; when he left there were 136. Whaley's sixteen mills represented 11% of the total number. During the same period South Carolina spindleage increased from 500,000 to 2,500,000 spindles, and Whaley's mills boasted 520,000 spindles, or 21% of the total number.(40) It was not only the numbers of mills and their spindles, however, which demonstrated the firm's significance. The technological and architectural quality of the mills themselves, many of which are still extant and in operation, confirmed W.B. Smith Whaley and Company's position as one of South Carolina's most prominent textile mill designers.

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NOTES

(1) David L. Carlton, <u>Mill and Town in South Carolina 1880-1920</u> (Baton Rouge: Louisiana State University Press, 1982), pp. 7-8, 40-41.

(2) Though J.E. Sirrine and Company, of Greenville, was another South Carolina textile engineering firm of regional and national stature, it was established in 1902, near the end of the Whaley company's work in South Carolina. Not only was Sirrine's major active period (1902-1947) later than Whaley's, but his company's significance lies more in the total number of its projects rather than in their technological advances or architectural designs.

(3) W.B. Smith Whaley and Company, <u>Modern Cotton Mill Engineering</u> (Columbia: The State Company, 1903), p. 11.

(4) <u>The State</u> (Columbia, S.C.), 10 December 1900; <u>Modern Cotton Mill Engineering</u>, p. 11; Fenelon DeVere Smith, "The Economic Development of the Textile Industry in the Columbia, South Carolina, Area from 1790 through 1916," Unpublished Ph.D. Dissertation, Department of Economics, University of Kentucky, 1952, pp. 116-18; Interview with Mrs. Isabel Whaley Sloan, daughter of W.B. Smith Whaley, West Columbia, S.C., 16 January 1990; <u>The State</u>, 14 December 1897.

(5) <u>The State</u>, 14 December 1897, 31 March 1892, 10 December 1900.

(6) <u>Modern Cotton Mill Engineering</u>, p. 17; <u>Ibid</u>.

(7) <u>Modern Cotton Mill Engineering</u>, p. 17 and <u>passim</u>., ; <u>The State</u>, 10 December 1900, 23 November 1903.

(8) <u>Modern Cotton Mill Engineering</u>, <u>passim</u>.; National Register of Historic Places Files, South Carolina State Historic Preservation Office, South Carolina Department of Archives and History, Columbia, S.C.

(9) <u>The State</u>, 14 December 1897.

(10) <u>Modern Cotton Mill Engineering</u>, p. 17.

(11) <u>Ibid</u>., p. 31.

(12) <u>The State</u>, 17 May, 22 August, 25 November 1899, 21 November 1900, 20 January, 12, 14 February 1901.

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(13) <u>Modern Cotton Mill Engineering</u>, p. 16.

(14) <u>Ibid</u>., pp. 21-23.

(15) <u>Ibid</u>., p. 31.

(16) Quoted in <u>The State</u>, 21 November 1900.

(17) <u>Modern Cotton Mill Engineering</u>, pp. 21, 22-23, 31, 39-40, 75-77.

(18) Quoted in <u>The State</u>, 20 January 1901. Emphasis added.

(19) <u>The State</u>, 12 February 1901.

(20) <u>Ibid</u>., 14 February 1901. Emphasis added.

(21) <u>Modern Cotton Mill Engineering</u>, p. 45.

(22) <u>Ibid</u>., p. 47.

(23) <u>The State</u>, 12 February 1901.

(24) Smith, <u>passim</u>., especially pp. 120-204.

(25) Interview with Mrs. Isabel Whaley Sloan, daughter of W.B. Smith Whaley, West Columbia, S.C., 16 January 1990.

(26) Smith, pp. 188-190; Carlton, pp. 139, 142-43; Melton A. McLaurin, "Early Labor Union Organizational Efforts in South Carolina Cotton Mills, 1880-1905," <u>South Carolina Historical Magazine</u> 72:1 (January 1971), 51-56.

(27) <u>The State</u>, 27 August 1901.

(28) <u>Ibid</u>. It was ironic that a large advertisement for W.B. Smith Whaley and Company, reading, "We have a large force of skilled architectural draftsmen, civil, mechanical and electrical engineers and inspectors and are prepared to furnish plans, specifications, and supervision of Cotton Mills - Power Plants (Steam, Water and Electrical), and other manufacturing enterprises," appeared in the same issue as Whaley's comment about unions at his mills.

(29) <u>Ibid</u>., 30, 31 August 1901.

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(30) _Ibid._, 3C, 31 August, 3 September 1901.

(31) McLaurin, 55.

(32) _Modern Cotton Mill Engineering, passim._; National Register
of Historic Places Files, South Carolina State Historic Preservation
Office, South Carolina Department of Archives and History, Columbia, S.C.

(33) Smith, pp. 193-207; _The State_, 15 November 1903.

(34) _The State_, 7 December 1903; Interview with Mrs. Isabel Whaley
Sloan, daughter of W.B. Smith Whaley, West Columbia, S.C., 16 January 1990.

(35) _Modern Cotton Mill Engineering_, p. 73; _The State_, 21
November 1903.

(36) _The State_, 7 December 1903; Smith, pp. 209-210.

(37) _Ibid._, 22 September 1904.

(38) Smith, pp. 207-213; Interview with Mrs. Isabel Whaley Sloan,
daughter of W.B. Smith Whaley, West Columbia, S.C., 16 January 1990;
Record of Contracts and Patents for the American Whaley Engine, W.B. Smith
Whaley Papers, in possession of Mrs. Isabel Whaley Sloan, West Columbia,
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(39) _Modern Cotton Mill Engineering_, p. 11.

(40) August Kohn, _The Cotton Mills of South Carolina_ (Columbia:
Republished from the Charleston _News and Courier_ by the South Carolina
Department of Agriculture, Commerce, and Immigration, 1907), p. 90;
Modern Cotton Mill Engineering, passim.

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Textile Mills in South Carolina Designed by W.B. Smith Whaley,
   1893-1903, Multiple Property Submission

   Buffalo Mill, Buffalo, Union County
      Buffalo Mill Historic District

Properties Already Listed in the National Register of Historic Places
and Contributing in Whole or in Part to the Multiple Property
   Submission

      Dekalb Mill, Camden, Kershaw County
         (listed as Wateree Plant of Kendall Mills)
            Kendall Mill Historic District   19 March 1982
      Courtenay Mill, Newry, Oconee County
            Newry Historic District   19 March 1982
      Richland Mill, Columbia, Richland County
         (listed as Richland Cotton Mill)   10 November 1983
      Enterprise Mill, Orangeburg, Orangeburg County
         (listed as Enterprise Cotton Mills Building)
            City of Orangeburg Multiple Resource Area 20 September 1985

G. Summary of Identification and Evaluation Methods
Discuss the methods used in developing the multiple property listing.

See continuation sheets

                                                                    ⌐x⌐ See continuation sheet

H. Major Bibliographical References

See continuation sheets

                                                                    ⌐x⌐ See continuation sheet

Primary location of additional documentation:

    ⌐x⌐ State historic preservation office   ☐ Local government
    ☐ Other State agency   ☐ University
    ☐ Federal agency   ☐ Other

    Specify repository: SC Department of Archives and History, Columbia, S.C.

I. Form Prepared By
name/title J. Tracy Power, NR Historian/Frank Brown III, NR Architectural Historian
organization SC Department of Archives and History   date 12 February 1990
street & number PO Box 11669   telephone (803) 734-8610
city or town   Columbia   state SC   zip code 29211

F. Associated Property Types

I. Name of Property Type _____

II. Description

    See continuation sheets

III. Significance

IV. Registration Requirements

                                                                                          [X] See continuation sheet

[X] See continuation sheet for additional property types

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Section F. Associated Property Types

I. Name of Property Type: Mill Buildings

II. Description: Mill buildings designed by W.B. Smith Whaley and
Company are large three- or four-story brick buildings. These have
uniform fenestration with buttresses inserted at regular intervals. Most
of these mill buildings have projecting multi-story entrance towers,
either one or two, on the front facade containing the mill clock and/or
bells. Exterior ornamentation varies from simple brickwork to elaborate
terra cotta panels. Whaley mills with a recognizable style are variants
of the Romanesque Revival. The interiors of mills are very simple large
open spaces. For the purposes of registration, powerhouses, whether part
of the main mill building or detached, are included under the property
type "Mill Buildings." These integral buildings are one- or two-story
brick buildings, commonly with basements and smokestacks.

III. Significance: The mill building was the focus around which
everything in the mill village revolved, being the industrial center. The
mill building in many cases is the only building which was designed by
W.B. Smith Whaley and Company. These properties qualify under the areas
of significance, ARCHITECTURE and INDUSTRY.

IV. Registration Requirements: To qualify for listing, these properties
must be intact examples. Additions and modernizations are expected in the
main mill buildings. Additions must not obscure the overall design of
the main historic facade, and the historic core should remain evident from
the exterior. Most windows in mill buildings have been bricked-in or
boarded during the mid-twentieth century due to the addition of
air-conditioning to the mills. This is acceptable if the fenestration
pattern is still distinguishable.

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Section F. Associated Property Types

I. Name of Property Type: Resources Associated with Mill or Mill Village

II. Description: This property type includes churches, offices, commercial buildings, baseball fields, schools, post offices, fire stations, and other buildings either owned, built, or directly associated with a mill company and designed by W.B. Smith Whaley and Company. Materials, size, and style of these resources vary from property to property according to usage.

III. Significance: The mill village was often a community unto itself whether geographically or socially detached from neighboring towns. As a separate entity the community needed the conventional public and service buildings-- churches, schools, meeting places, commercial builidings, entertainment facilities-- to function. In some villages the mill architectural or engineering firm was responisible for the design of these buildings. At Buffalo, for example, the Whaley firm was responsible for initial auxiliary buildings-- the mill office and the commercial buildings; at Olympia he designed not only the mill, but the fire station and churches as well. These properties qualify under the areas of significance, ARCHITECTURE and INDUSTRY.

IV. Registration Requirements: To qualify for listing, these properties must maintain their integrity to the degree of being recognizable to their period of significance. Rear additions and minor alterations that do not destroy this interpretation are acceptable.

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Section F. Associated Property Types

I. Name of Property Type: Mill Housing

II. Description: Mill housing exists in many forms and differs from mill
to mill and even within the village, due to personnel housed, family
sizes, and philosophies of the owners. Their importance lies in their
assemblage, not in the individual components. Both managerial/supervisor
and operative housing have been grouped together in this property type.
The houses are usually placed closely together lining streets, but with
larger lots for the better houses. The managerial/supervisor housing is
generally larger, two-story, reflecting current popular tastes, whether
Colonial Revival, Queen Anne, Craftsman or a combination. Operative
housing was much simpler with little or no ornament. These were either
one- or one-and-a-half story single frame dwellings or two-story duplexes
with clapboard and full facade shed porches on brick pier foundation.

III. Significance: Collections of mill housing are important elements in
interpreting mill village life. Their importance lies more on the group
of properties defining the character of the district than the
architectural importance of the individual house. The sense of community
implied in the phrase "mill village" is due to the visual and spatial
presence of the mill's housing. The housing associated with Whaley's
Columbia mills are the only known examples of mill housing in South
Carolina designed by W.B. Smith Whaley and Company. These properties
qualify under the areas of significance, ARCHITECTURE and INDUSTRY.

IV. Registration Requirements: A concentration of contributing housing,
irrespective of the total number of resources, must be present in the
context of the mill and its surroundings. To be a contributing resource,
a dwelling must maintain its original form; more specifically it must
retain its original roof and porch shape, and clear evidence of opening
pattern. Alterations such as synthetic and aluminum siding, alternate
single window sash and porch supports, and small additions and enclosures,
are acceptable as long as they do not impair the "feeling" of a mill house.

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Section G.   Summary of Identification and Evaluation Methods

The identification and evaluation of specific textile mills in the state designed by W.B. Smith Whaley has evolved from the more general South Carolina Statewide Survey and National Register activity concerned with the industry as a whole. The most significant - though not comprehensive - such work to date was "South Carolina Textile Mills and Villages: A Statewide Survey," conducted by graduate students of the Applied History Program at the University of South Carolina in 1983-84. This project, funded in part by a survey and planning grant from the South Carolina State Historic Preservation Office (SHPO), identified, surveyed, and evaluated some twenty textile mills and villages.

Of these twelve, Buffalo Mill (1901-02) was considered to have "the highest potential for National Register listing . . . the Buffalo plant and community are most highly representative of a well-kept and well-maintained early 20th century South Carolina mill complex." In addition, "Focusing on the Past: Photographs of Historic Structures in South Carolina," a 1987 project of the SHPO and the Historic American Buildings Survey (HABS)/Historic American Engineering Record (HAER) included the photo-documentation of the Buffalo Mill and village by Jack Boucher, HABS photographer. These previous evaluations, combined with staff familiarity with the textile mills in the state, made the nomination of a historic district at Buffalo a high priority. Staff members involved in the planning and execution of the project were Andrew W. Chandler, National Register Manager (who had surveyed the complex in 1983 as a graduate student), J. Tracy Power, National Register Historian, and Frank Brown III, National Register Architectural Historian.

At an early stage in the historical and architectural research, it became clear that the Buffalo Mill's significance was not only as a particularly intact mill and village, but in a wider context. It also represented an integral component of South Carolina's textile industry in the late nineteenth and early twentieth centuries, and more specifically, perhaps the most intact example of the textile mill designs of W.B. Smith Whaley. After further historical and architectural research on Whaley's career, and reference to previous survey and National Register activity relevant to his mills, the National Register staff determined to develop a historic context on Whaley's textile mill design in South Carolina from 1893 to 1903.

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Whaley designed sixteen textile mills in the state. Of these, four –
Dekalb, Courtenay, Richland, and Enterprise – have been previously listed
individually or as components of historic districts in the National
Register; four – Buffalo, Lancaster # 2, Union # 1, and Union # 2 – were
identified and evaluated as components of "South Carolina Textile Mills
and Villages: A Statewide Survey;" and one – Warrenville – was identified
and evaluated as a component of the "Historical and Architectural Survey
of Horse Creek Valley," in Aiken County, conducted by graduate students of
the Applied History Program at the University of South Carolina in
1985-86. The four mills surveyed but not previously listed in the
Register (excluding Buffalo, which is the first component of this historic
context) are considered to be potentially eligible for listing. Of the
remaining six Whaley-designed mills, four have been identified and
evaluated by the National Register staff in preparation for this historic
context. Two – Granby and Olympia – are considered potentially eligible
for listing; two – Capital City and Glenn Lowry – have lost their
integrity and are not considered to be eligible for listing. The
remaining three mills – Inman, Seneca, and Ware Shoals – have not, to
date, been surveyed or evaluated by the National Register staff.

The National Register staff conducted extensive historical and
architectural research on the establishment, growth, and decline of the
Buffalo Mill and its place in both the state's textile industry and in
Whaley's career. In addition, the mill and village were re-surveyed and
-evaluated in January 1990, using the July 1983 survey as a starting point
but revising mapping, photo-documentation, and architectural description
as necessary.

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